

FIG. 1

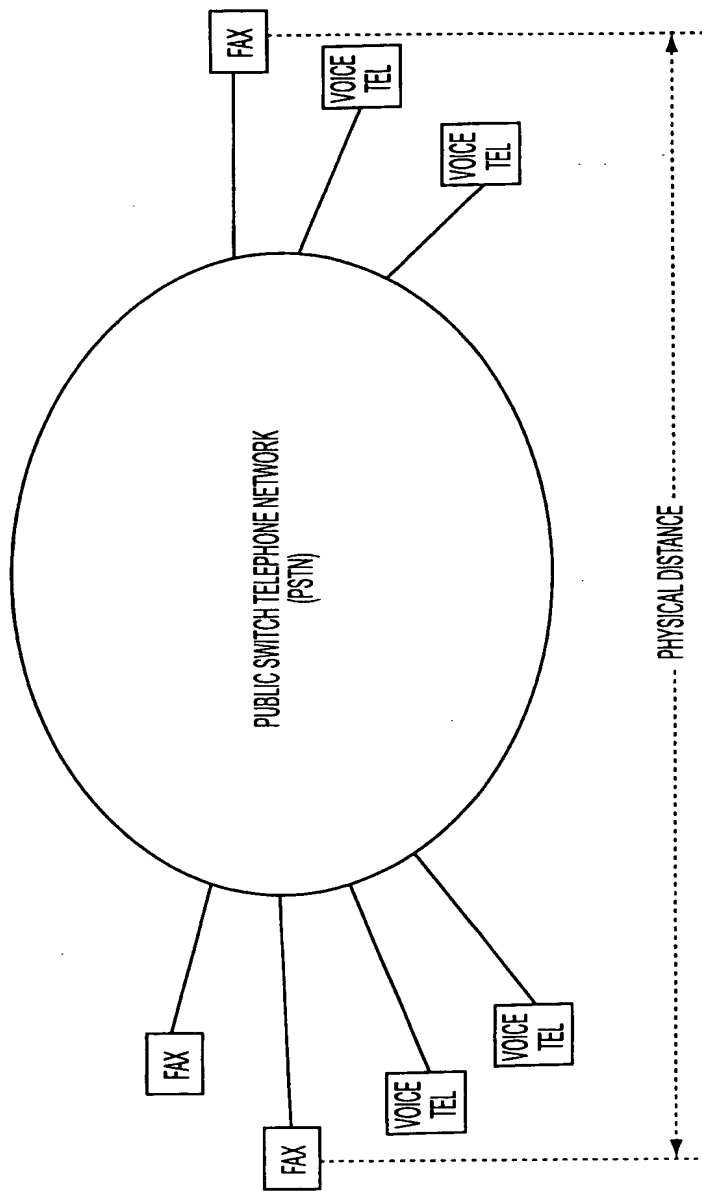


FIG. 1

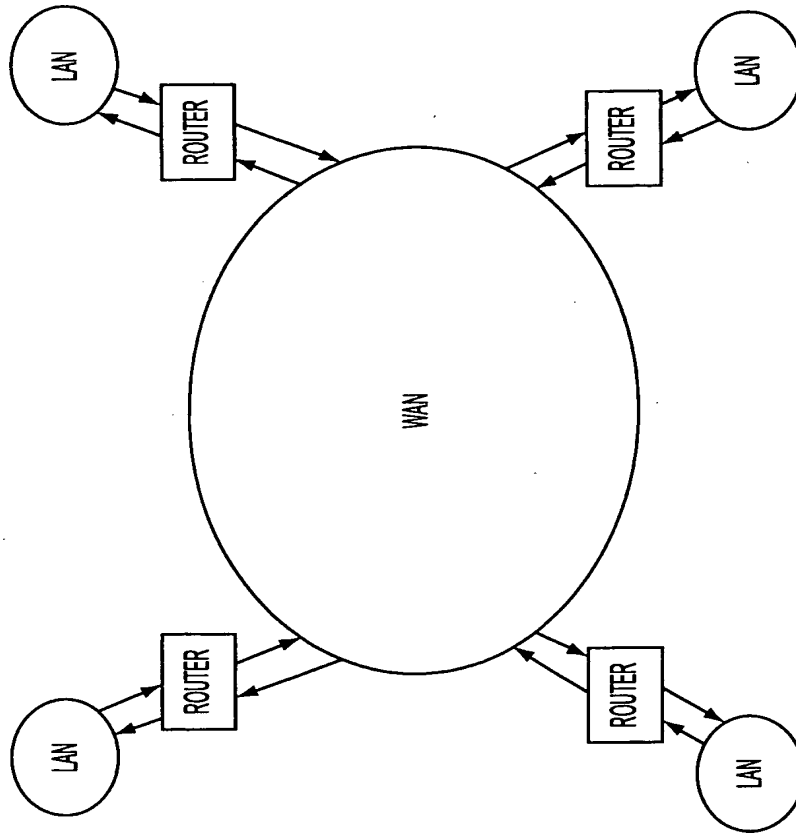


FIG. 2

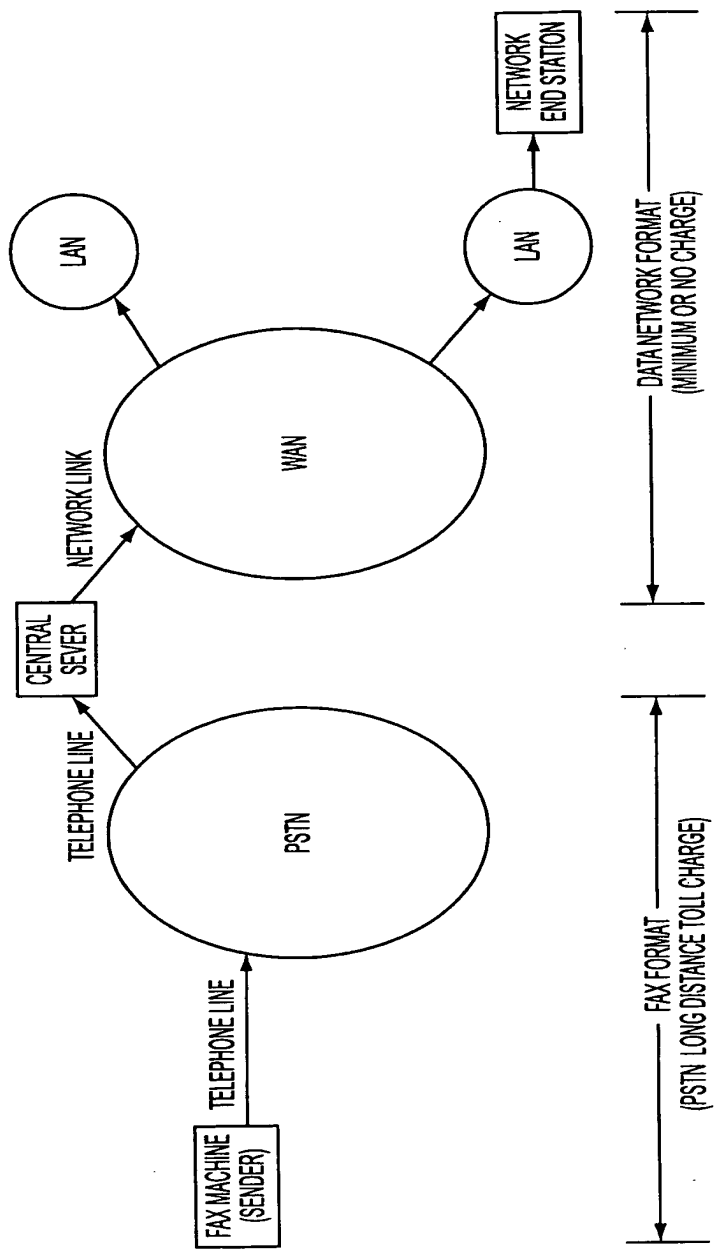


FIG. 3

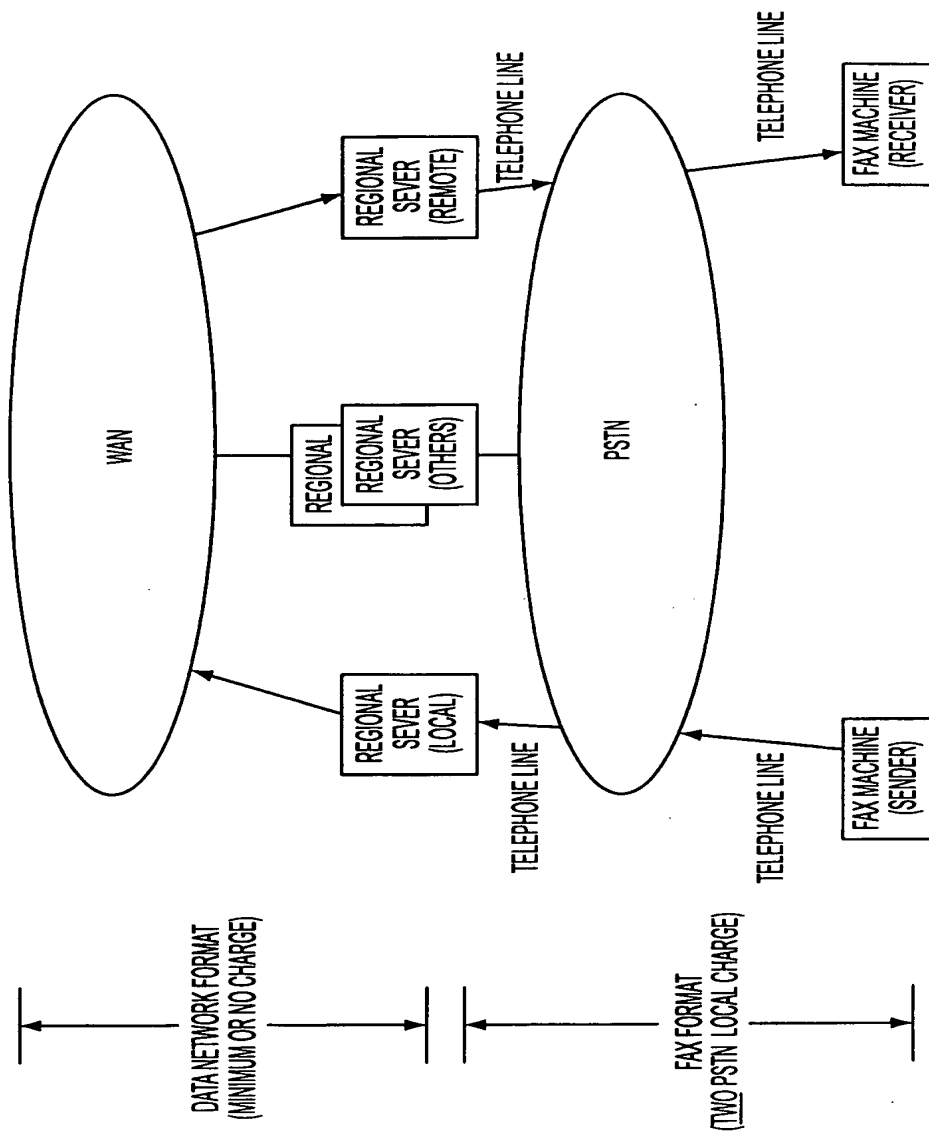


FIG. 4

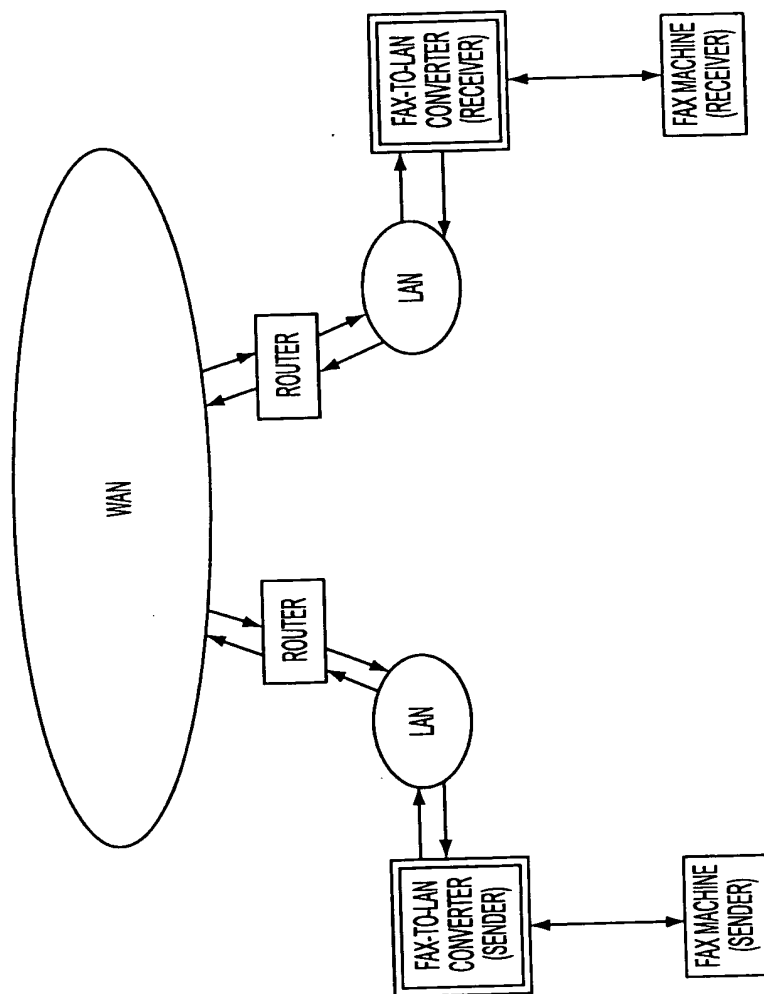


FIG. 5

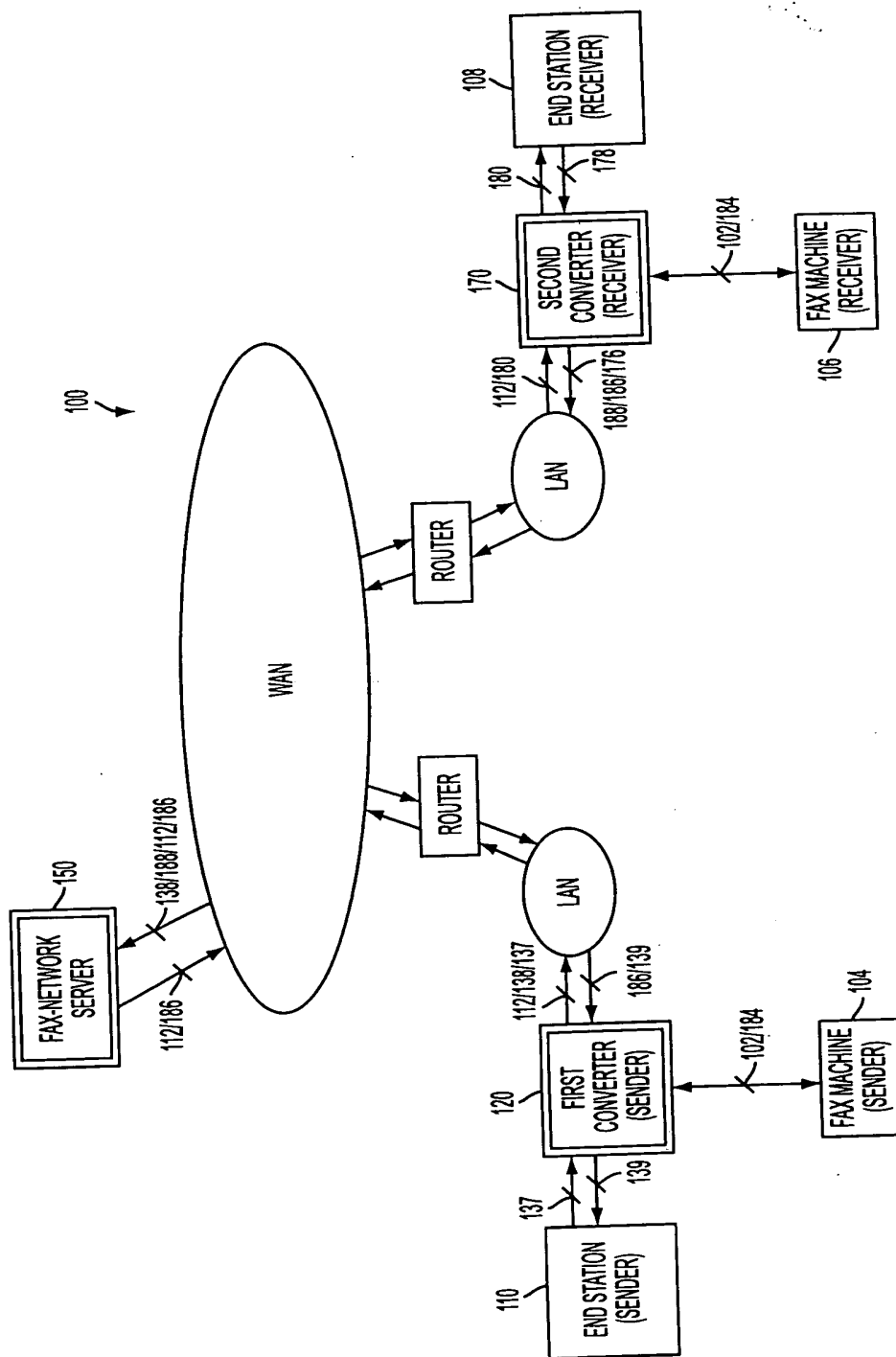


FIG. 6

TOP SECRET

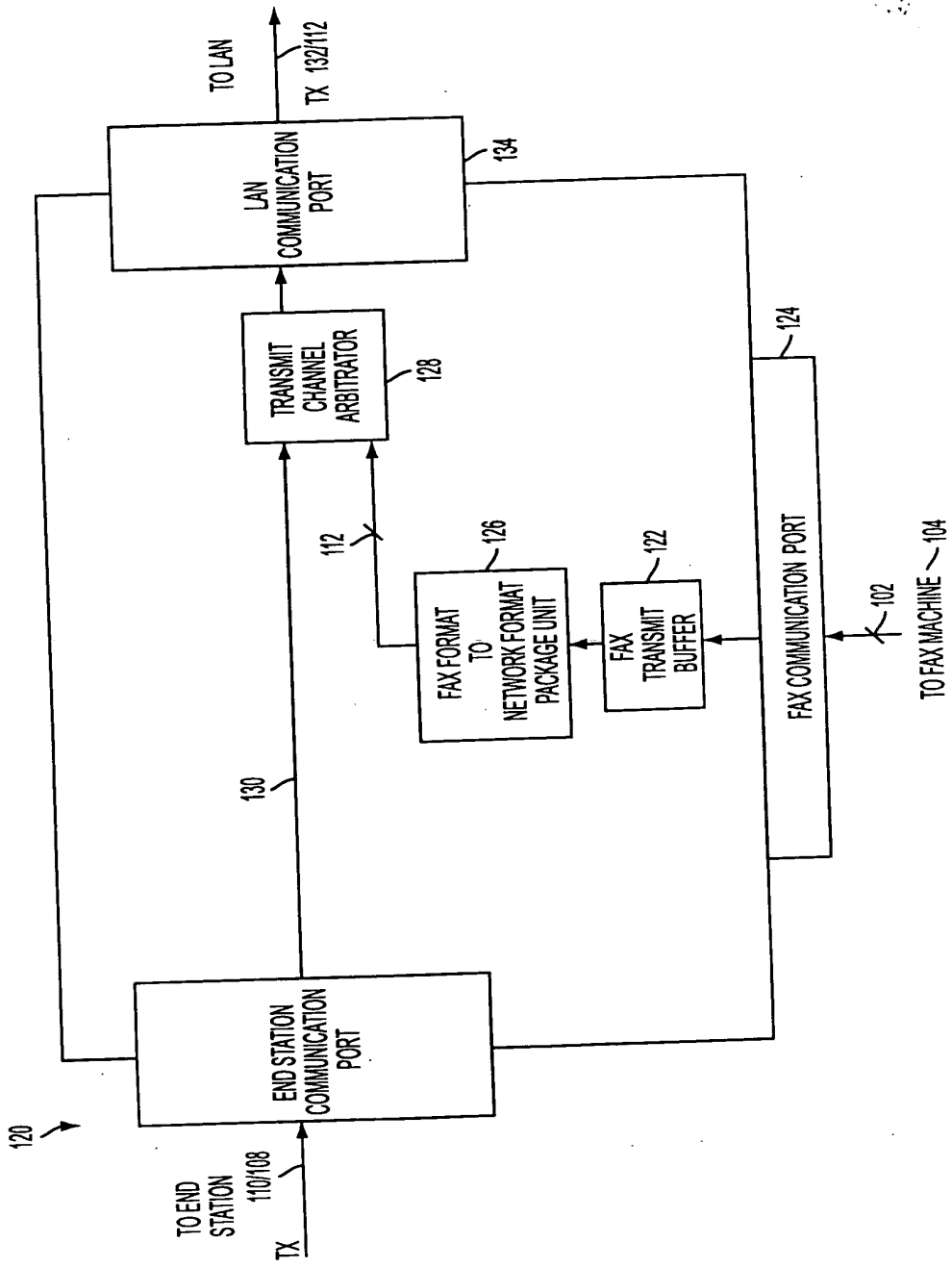


FIG. 7

FIG. 8

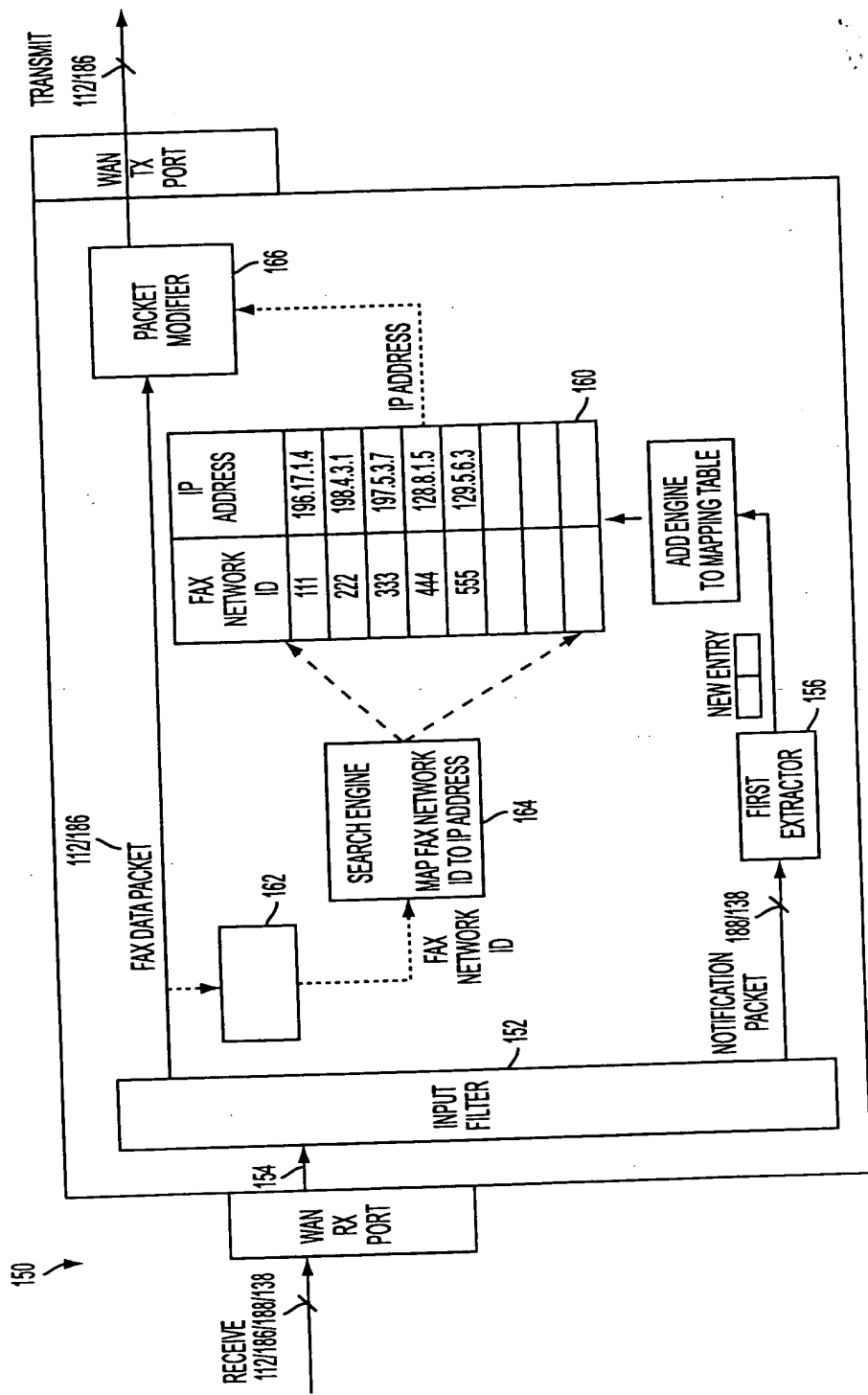


FIG. 8

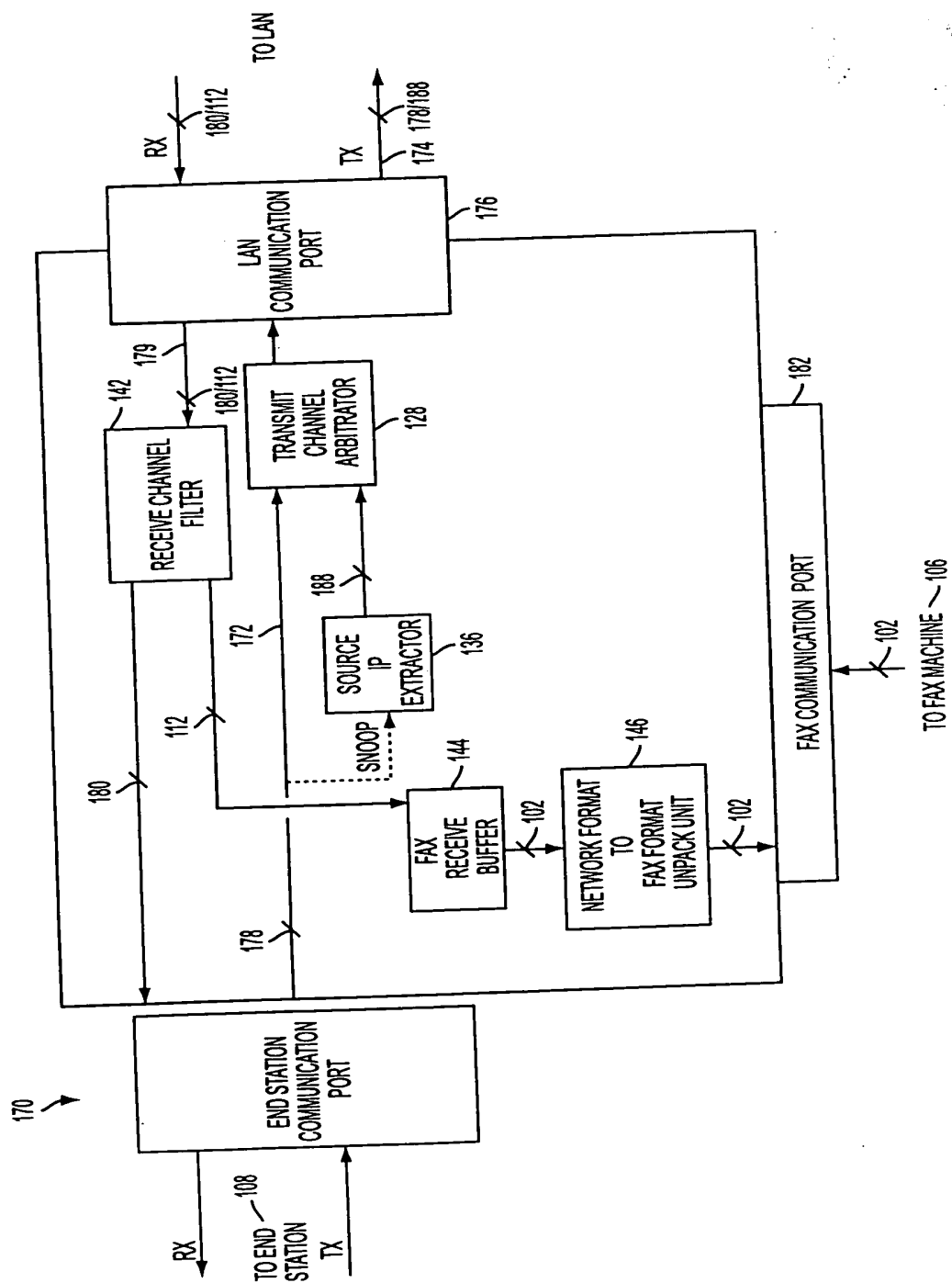


FIG. 9

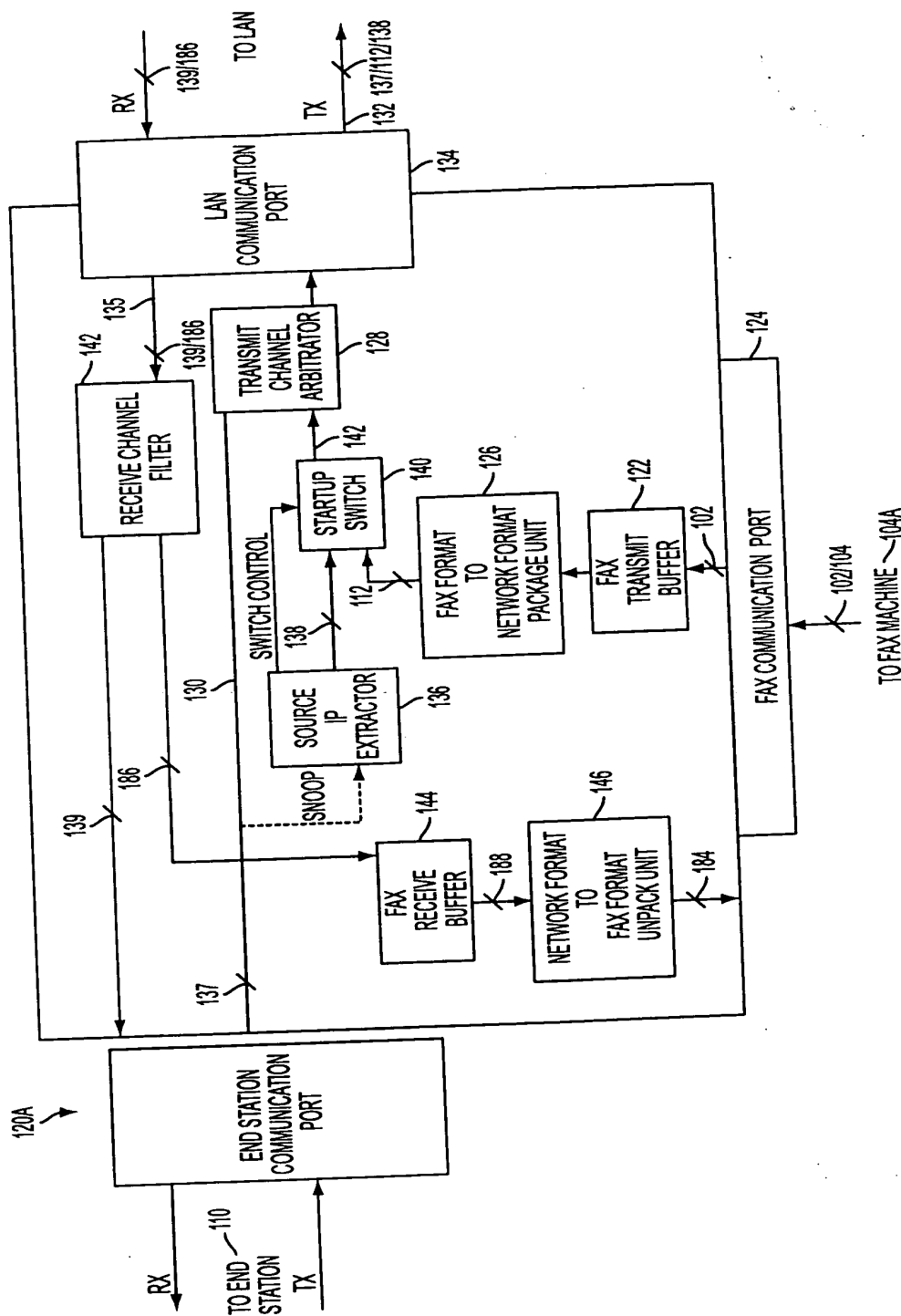


FIG. 10

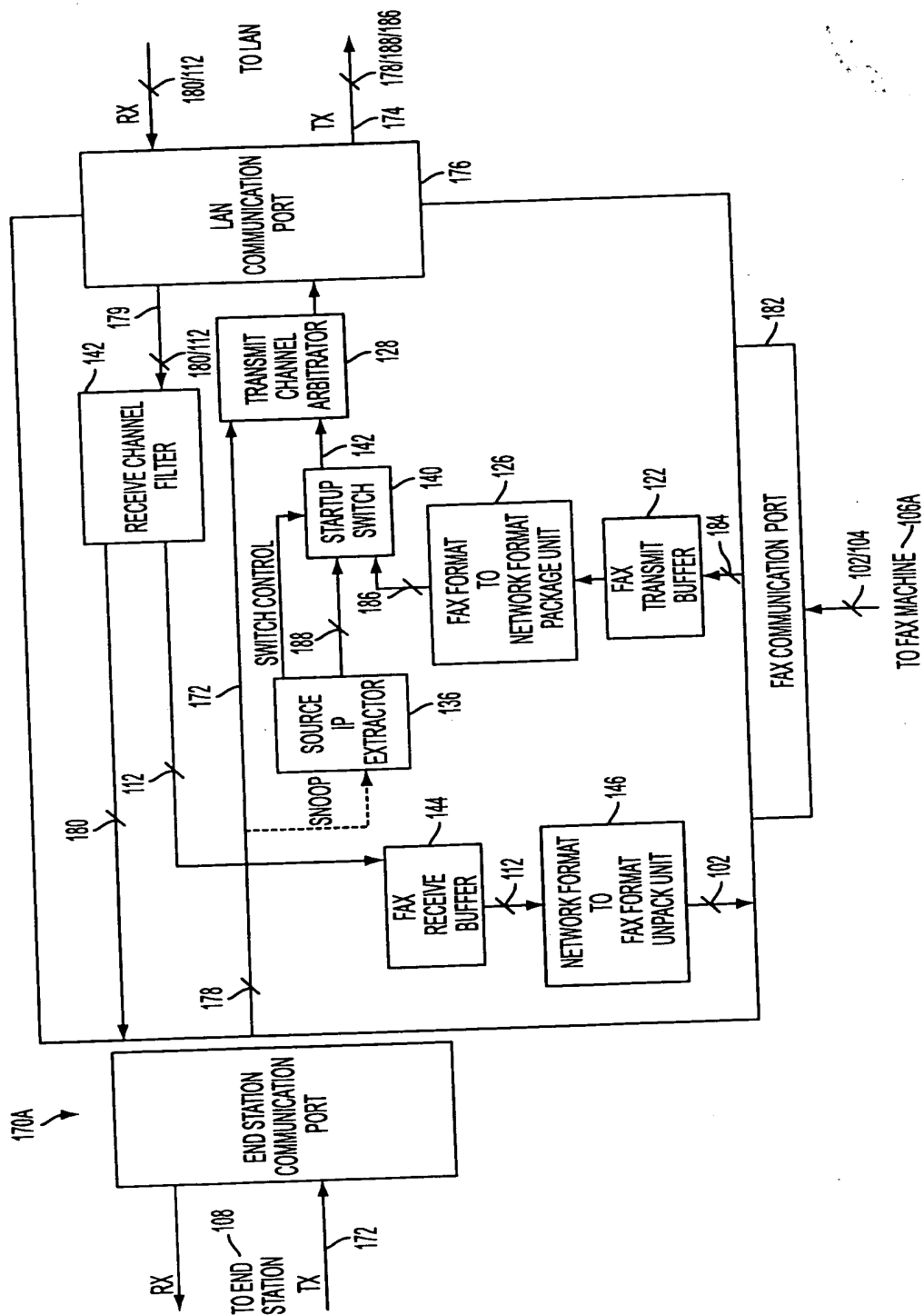


FIG. 11

09006801

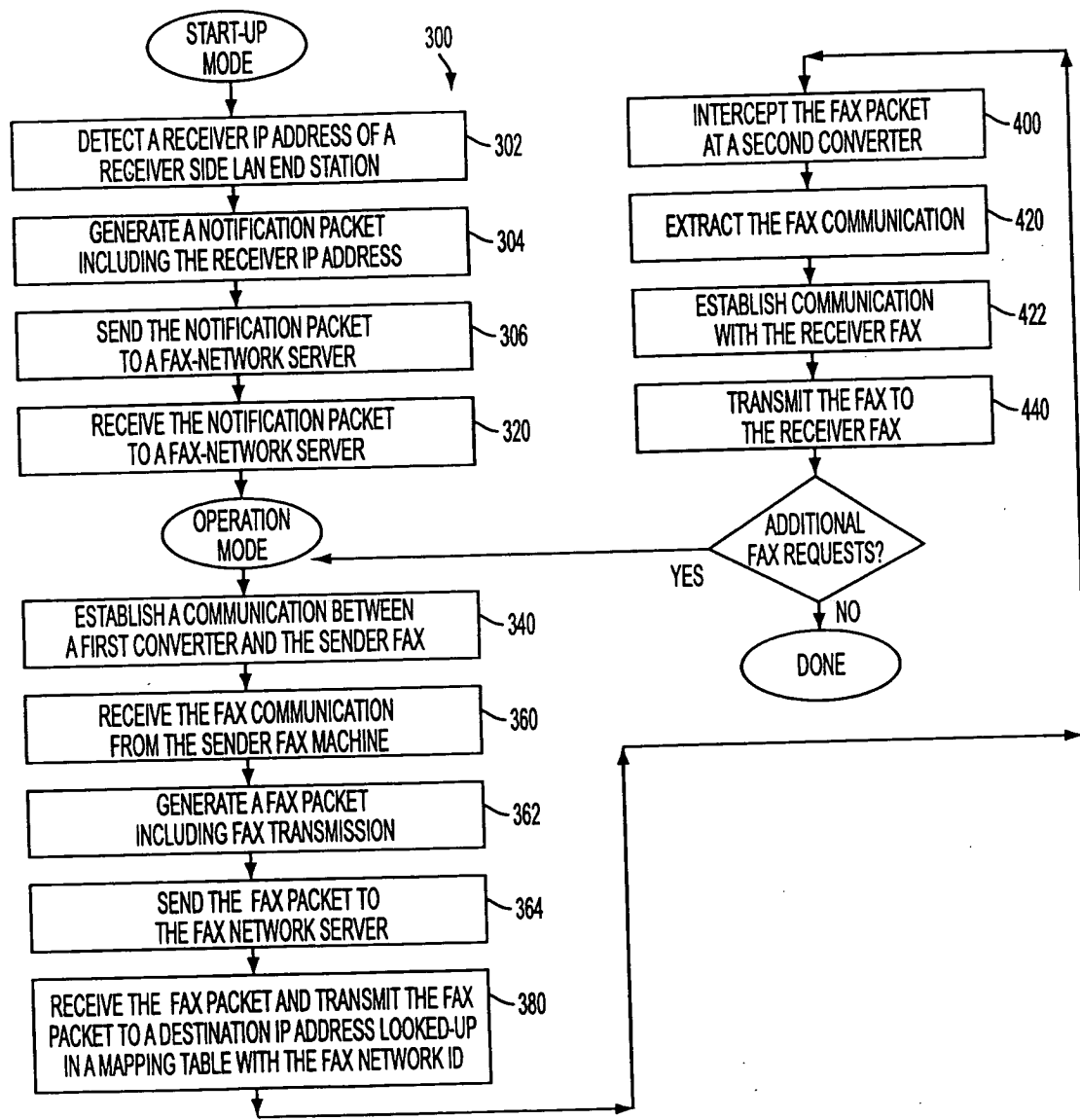


FIG.12A

```
graph TD
    subgraph 300 [300]
        S1([START-UP MODE]) --> S2[DETECT A RECEIVER IP ADDRESS OF A RECEIVER SIDE LAN END STATION 302]
        S2 --> S3[GENERATE A NOTIFICATION PACKET INCLUDING THE RECEIVER IP ADDRESS 304]
        S3 --> S4[SEND A NOTIFICATION PACKET TO A LOCAL FAX SERVER, THEN TO THE CENTRAL FAX SERVER 306]
        S4 --> S5[RECEIVE THE NOTIFICATION PACKET AT THE FAX NETWORK SERVER 320]
        S5 --> S6([OPERATION MODE])
    end

    subgraph 400 [400]
        S6 --> S7[ESTABLISH A COMMUNICATION BETWEEN A FIRST CONVERTER AND THE SENDER FAX MACHINE 340]
        S7 --> S8[RECEIVE THE FAX COMMUNICATION FROM THE SENDER FAX MACHINE 360]
        S8 --> S9[GENERATE A FAX PACKET INCLUDING FAX TRANSMISSION 362]
        S9 --> S10[QUERY AND RESOLVE THE RECEIVER IP ADDRESS 363]
        S10 --> S11[SEND THE FAX DATA PACKET DIRECTLY TO THE RECEIVER CONVERTER 364]
    end

    S11 --> S12{ADDITIONAL FAX REQUEST?}
    S12 -- YES --> S6
    S12 -- NO --> S13([DONE])
```

The flowchart illustrates a fax communication system with two main modes: **START-UP MODE** and **OPERATION MODE**.

START-UP MODE (300):

- 302: DETECT A RECEIVER IP ADDRESS OF A RECEIVER SIDE LAN END STATION
- 304: GENERATE A NOTIFICATION PACKET INCLUDING THE RECEIVER IP ADDRESS
- 306: SEND A NOTIFICATION PACKET TO A LOCAL FAX SERVER, THEN TO THE CENTRAL FAX SERVER
- 320: RECEIVE THE NOTIFICATION PACKET AT THE FAX NETWORK SERVER
- 300 ends at the **OPERATION MODE** transition.

OPERATION MODE:

- 340: ESTABLISH A COMMUNICATION BETWEEN A FIRST CONVERTER AND THE SENDER FAX MACHINE
- 360: RECEIVE THE FAX COMMUNICATION FROM THE SENDER FAX MACHINE
- 362: GENERATE A FAX PACKET INCLUDING FAX TRANSMISSION
- 363: QUERY AND RESOLVE THE RECEIVER IP ADDRESS
- 364: SEND THE FAX DATA PACKET DIRECTLY TO THE RECEIVER CONVERTER

Post-Operation Mode:

- Decision: **ADDITIONAL FAX REQUEST?**
- If **YES**, the process loops back to the **OPERATION MODE** start.
- If **NO**, the process ends at **DONE**.

FIG.12B

09800600 052501

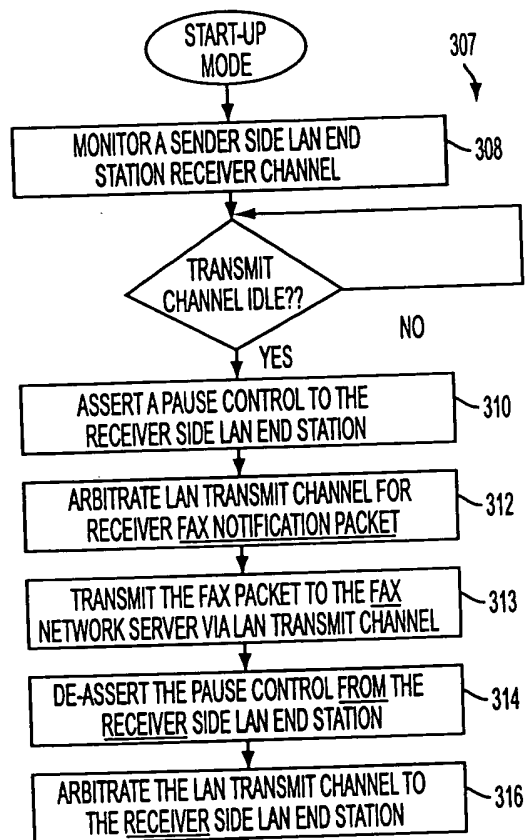


FIG.13

4900660-05901

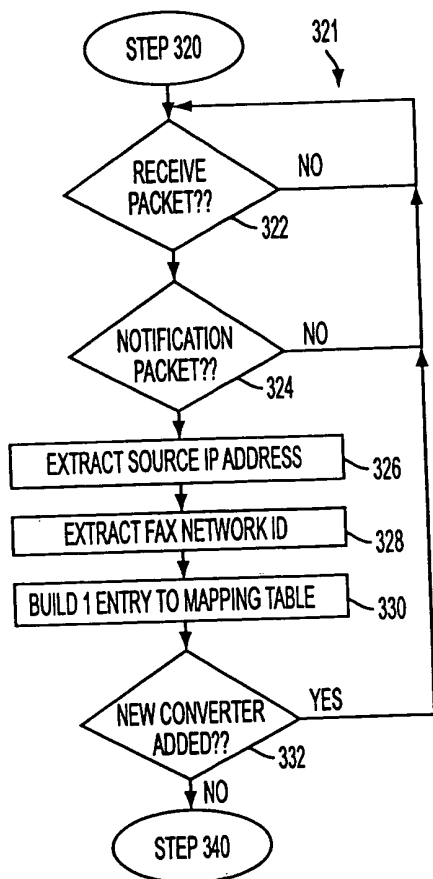


FIG.14A

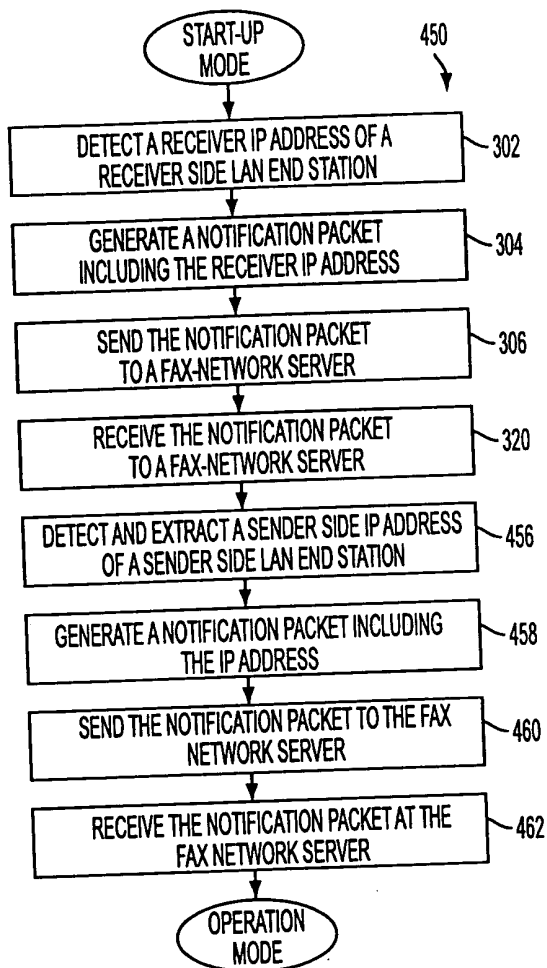


FIG.15

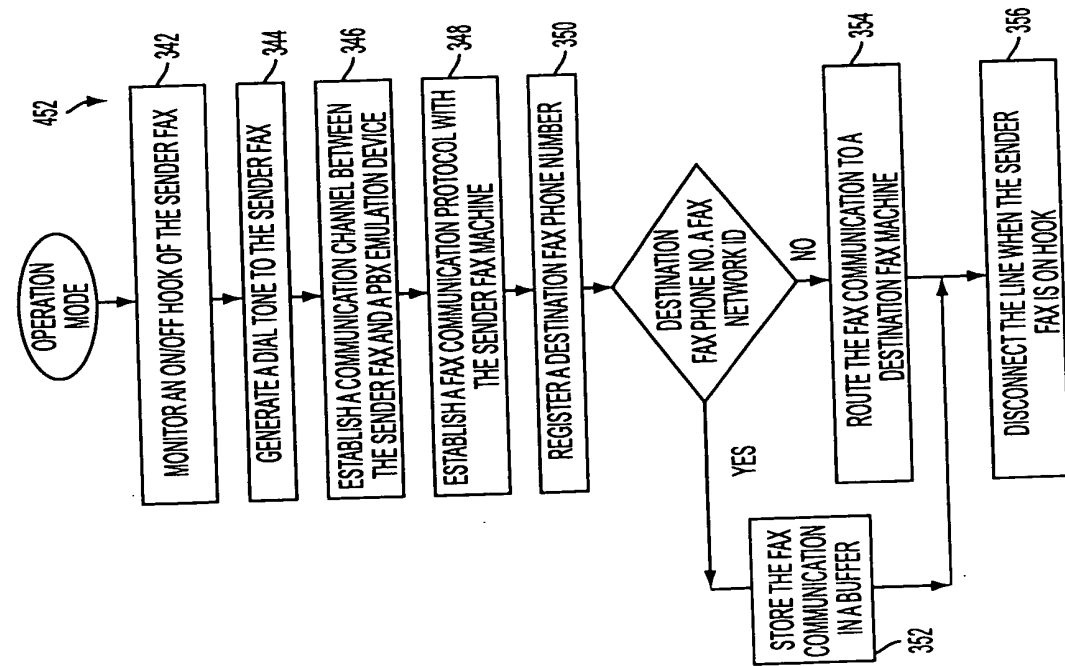


FIG.16

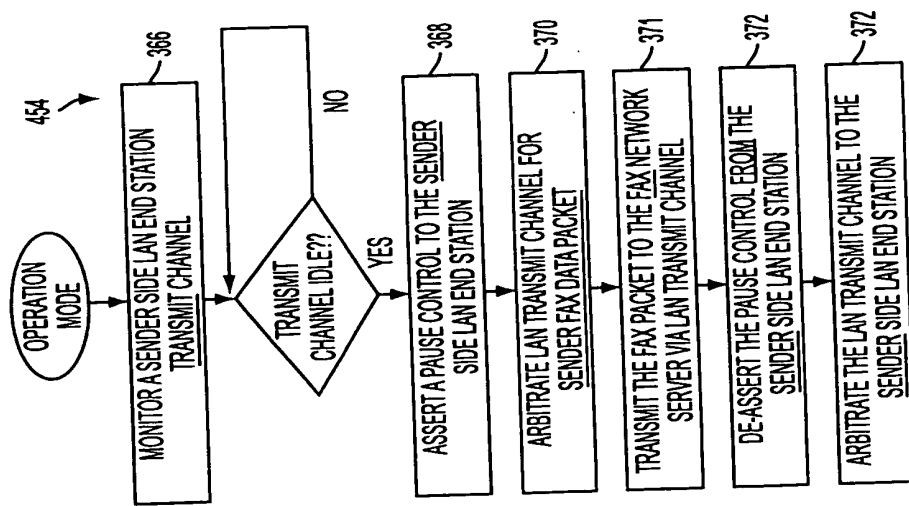


FIG.17A


```
graph TD
    Start([OPERATION MODE]) --> 366[MONITOR A SENDER SIDE LAN END STATION TRANSMIT BUFFER STATUS TRANSMIT CHANNEL]
    366 --> 366-1{TIME TO START SUB-STREAM TRANSMISSION??}
    366-1 -- NO --> 366
    366-1 -- YES --> 368[ASSERT A PAUSE CONTROL TO THE SENDER SIDE LAN END STATION]
    368 --> 370[ARBITRATE LAN TRANSMIT CHANNEL FOR SENDER FAX DATA PACKET]
    370 --> 371[TRANSMIT THE FAX PACKET TO THE FAX NETWORK VIA LAN TRANSMIT CHANNEL]
    371 --> 371-1{ALL HIGH PRIORITY SUB-STREAM PACKET TRANSMITTED??}
    371-1 -- NO --> 371
    371-1 -- YES --> 372[DE-ASSERT THE PAUSE CONTROL FROM THE SENDER SIDE LAN END STATION]
    372 --> 372[ARBITRATE THE LAN TRANSMIT CHANNEL TO THE SENDER SIDE LAN END STATION]
```

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OPERATION MODE

MONITOR A SENDER SIDE LAN END STATION TRANSMIT BUFFER STATUS TRANSMIT CHANNEL 366

TIME TO START SUB-STREAM TRANSMISSION?? 366-1

YES

NO

ASSERT A PAUSE CONTROL TO THE SENDER SIDE LAN END STATION 368

ARBITRATE LAN TRANSMIT CHANNEL FOR SENDER FAX DATA PACKET 370

TRANSMIT THE FAX PACKET TO THE FAX NETWORK VIA LAN TRANSMIT CHANNEL 371

ALL HIGH PRIORITY SUB-STREAM PACKET TRANSMITTED?? 371-1

YES

NO

DE-ASSERT THE PAUSE CONTROL FROM THE SENDER SIDE LAN END STATION 372

ARBITRATE THE LAN TRANSMIT CHANNEL TO THE SENDER SIDE LAN END STATION 372

FIG.17B

OPERATION
MODE

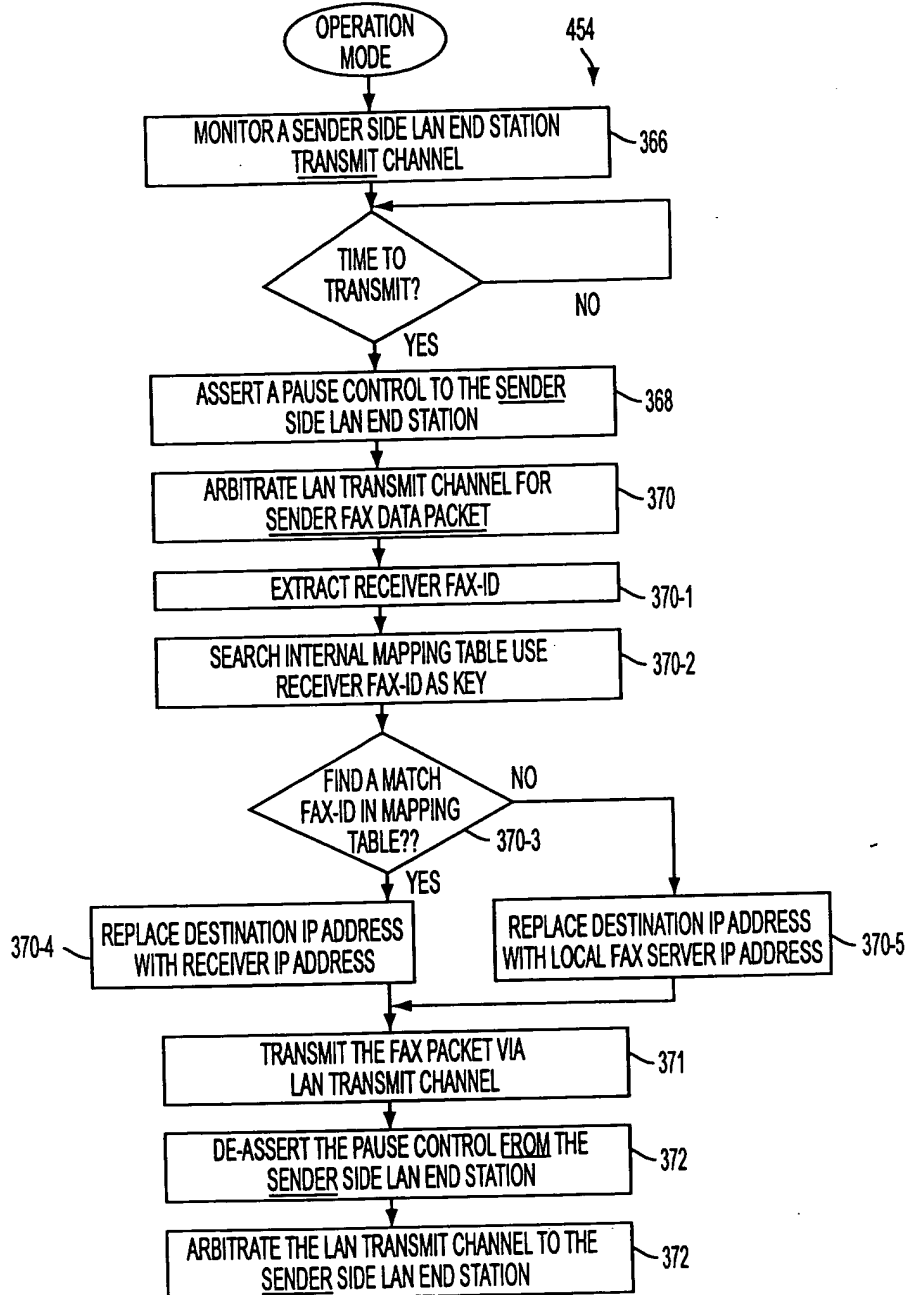


FIG. 17C

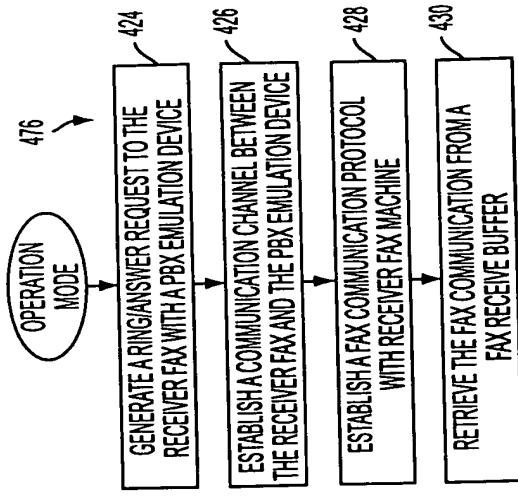


FIG.20

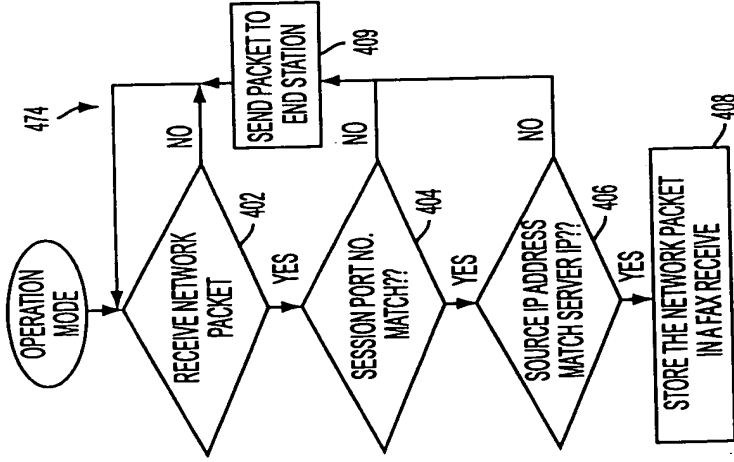


FIG.19A

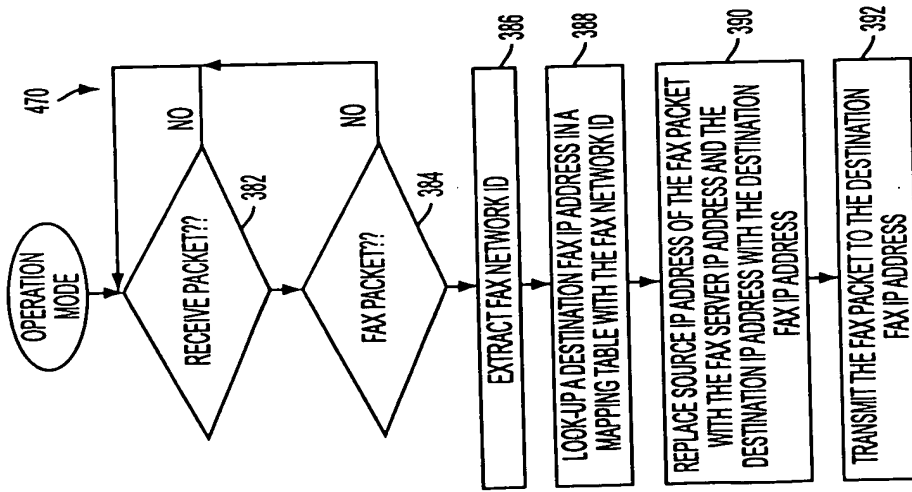


FIG.18A

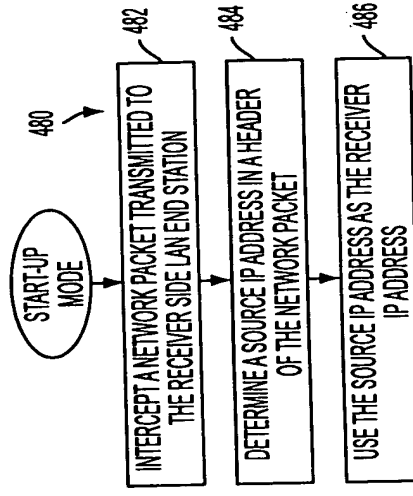


FIG.21

09800660-052901

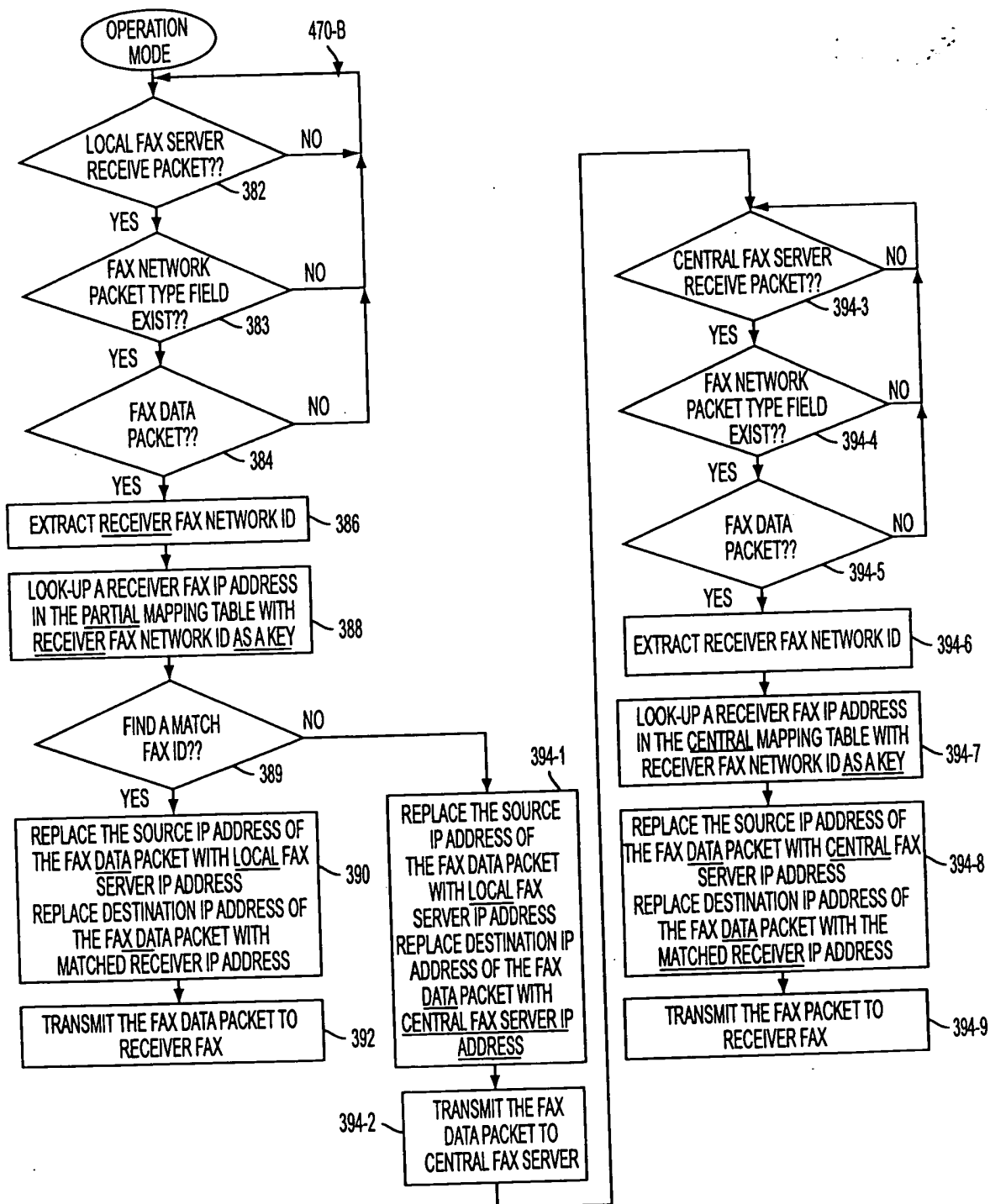


FIG.18B

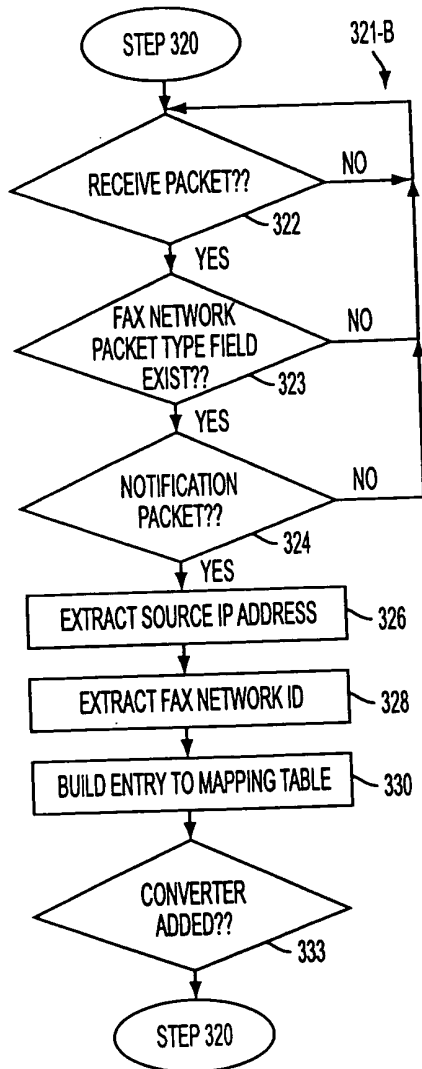


FIG.14B

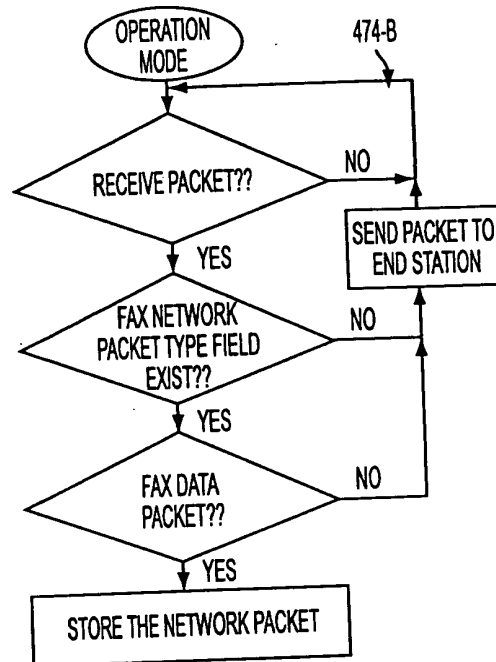


FIG.19B

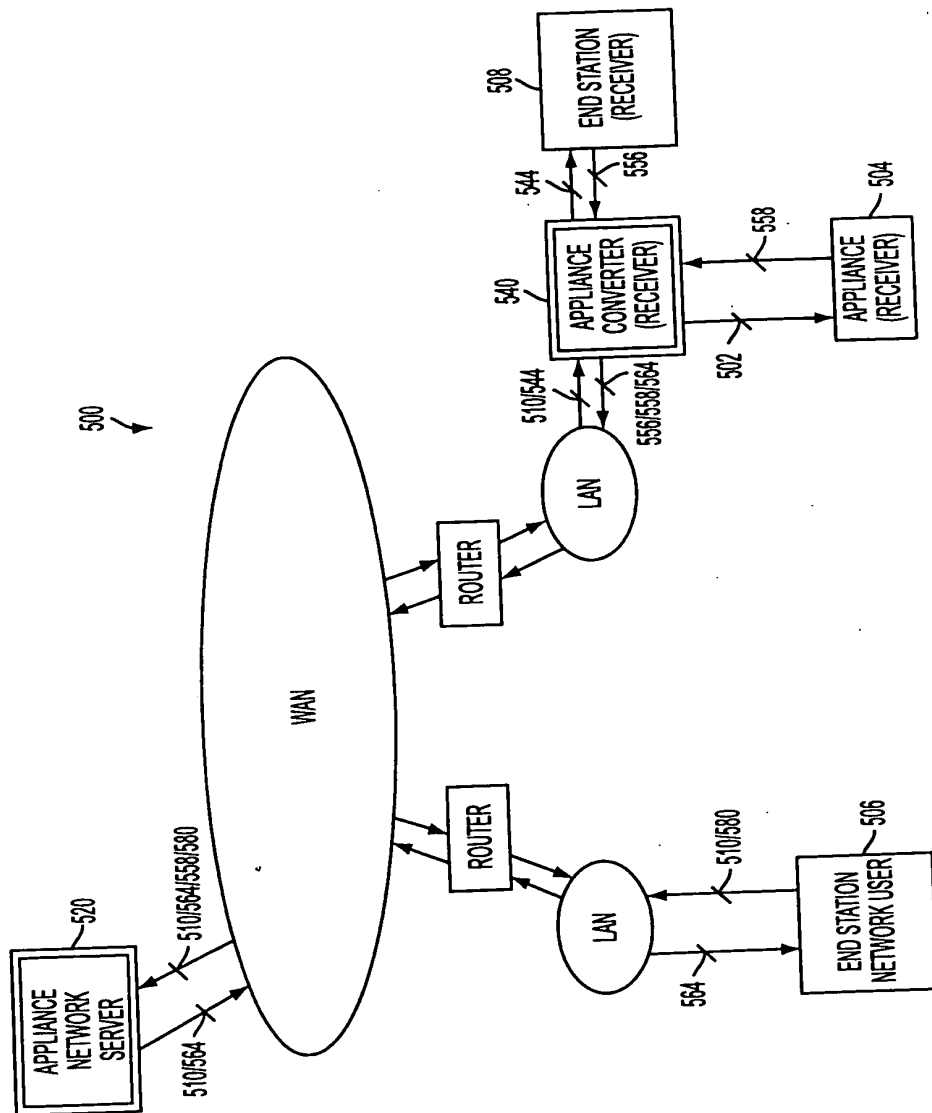


FIG. 22

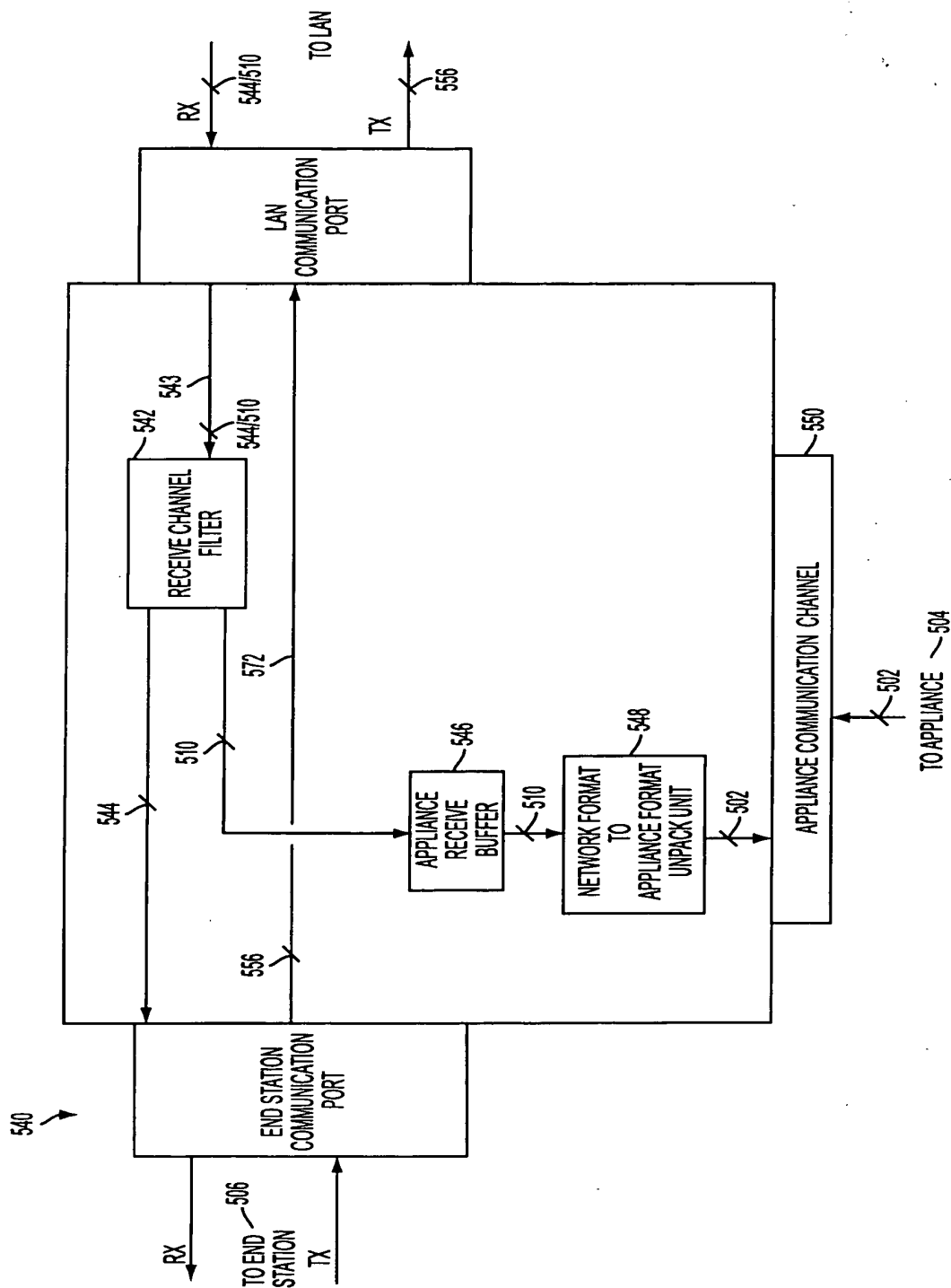
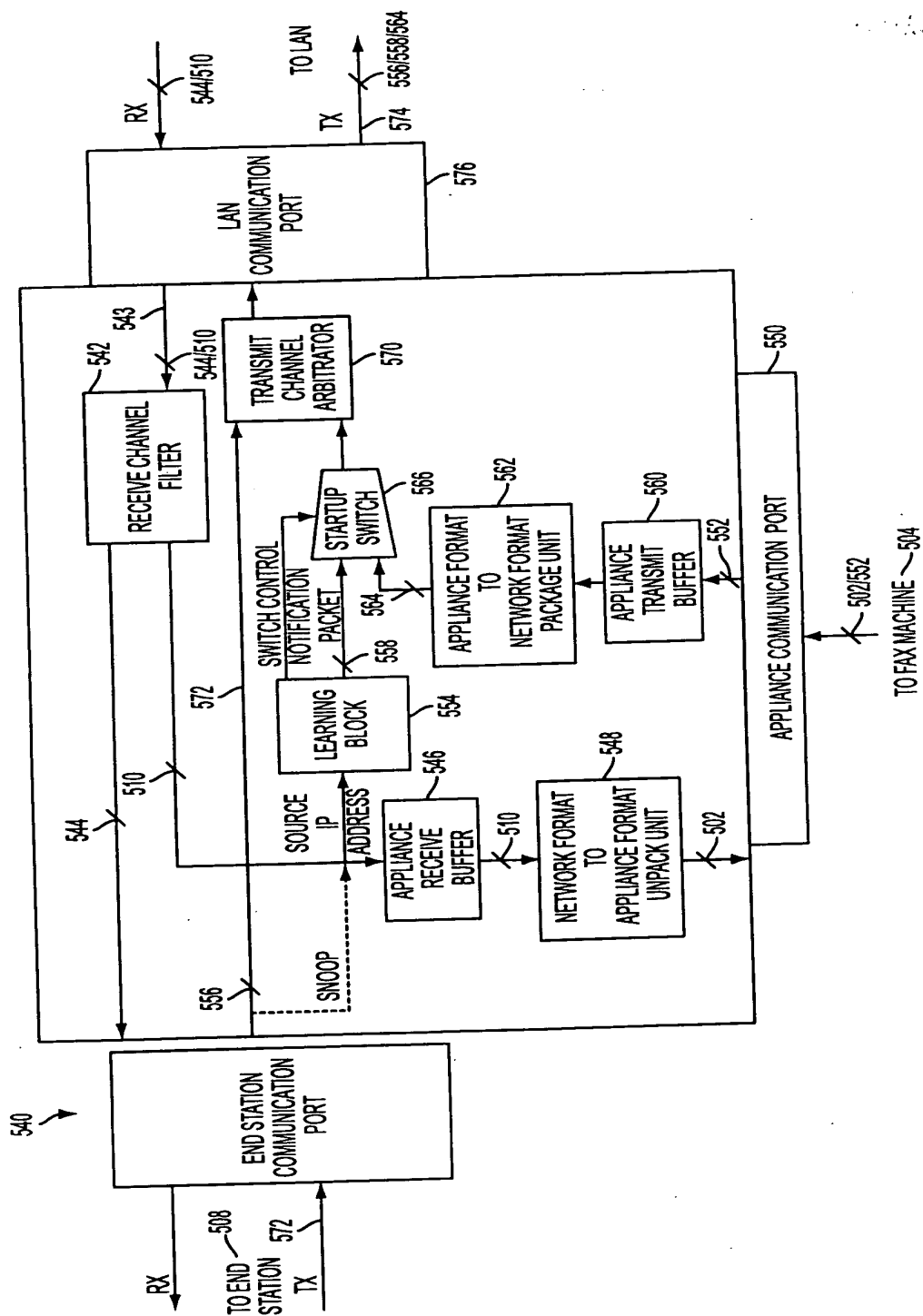


FIG. 23

[illegible]

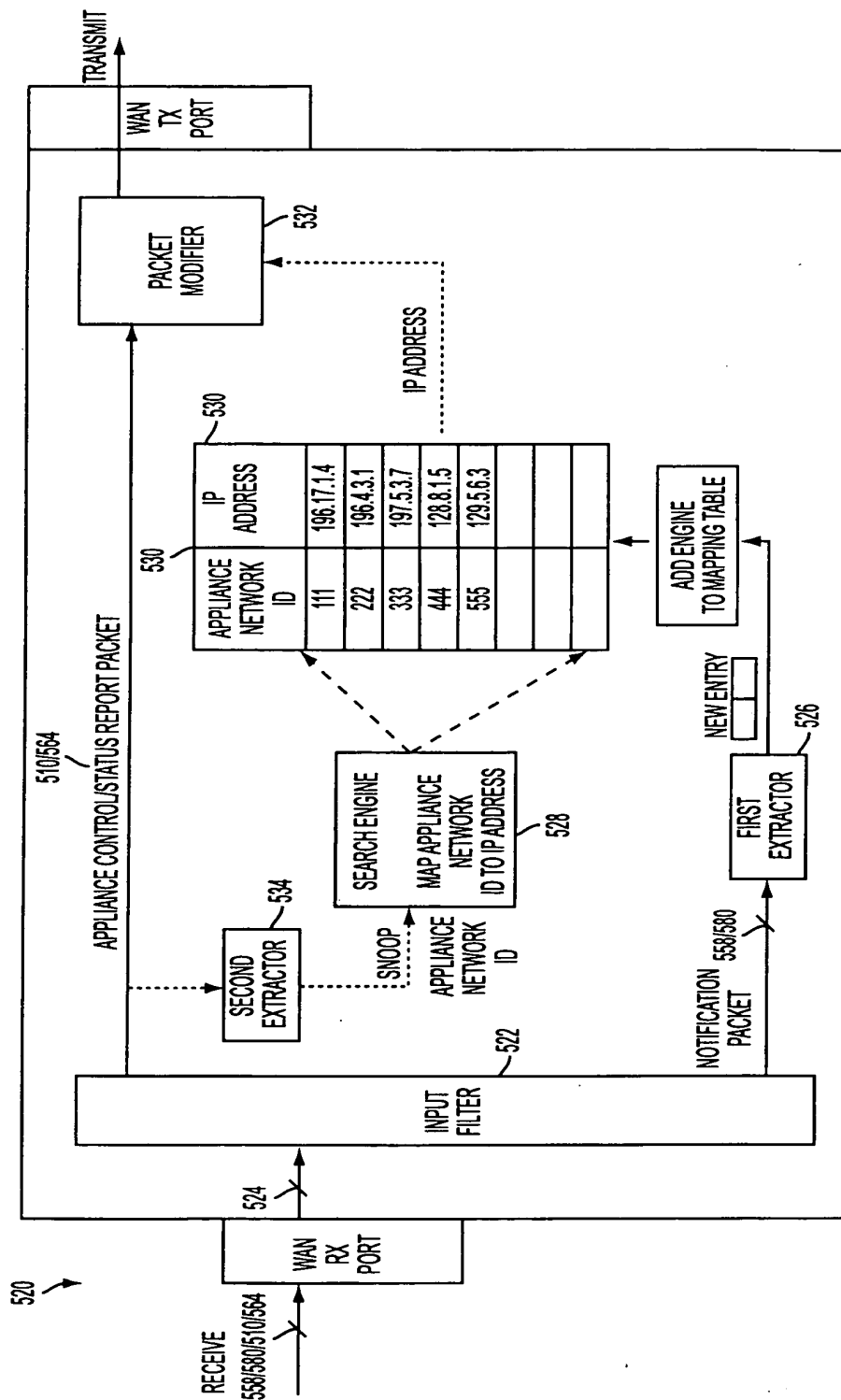


FIG. 25

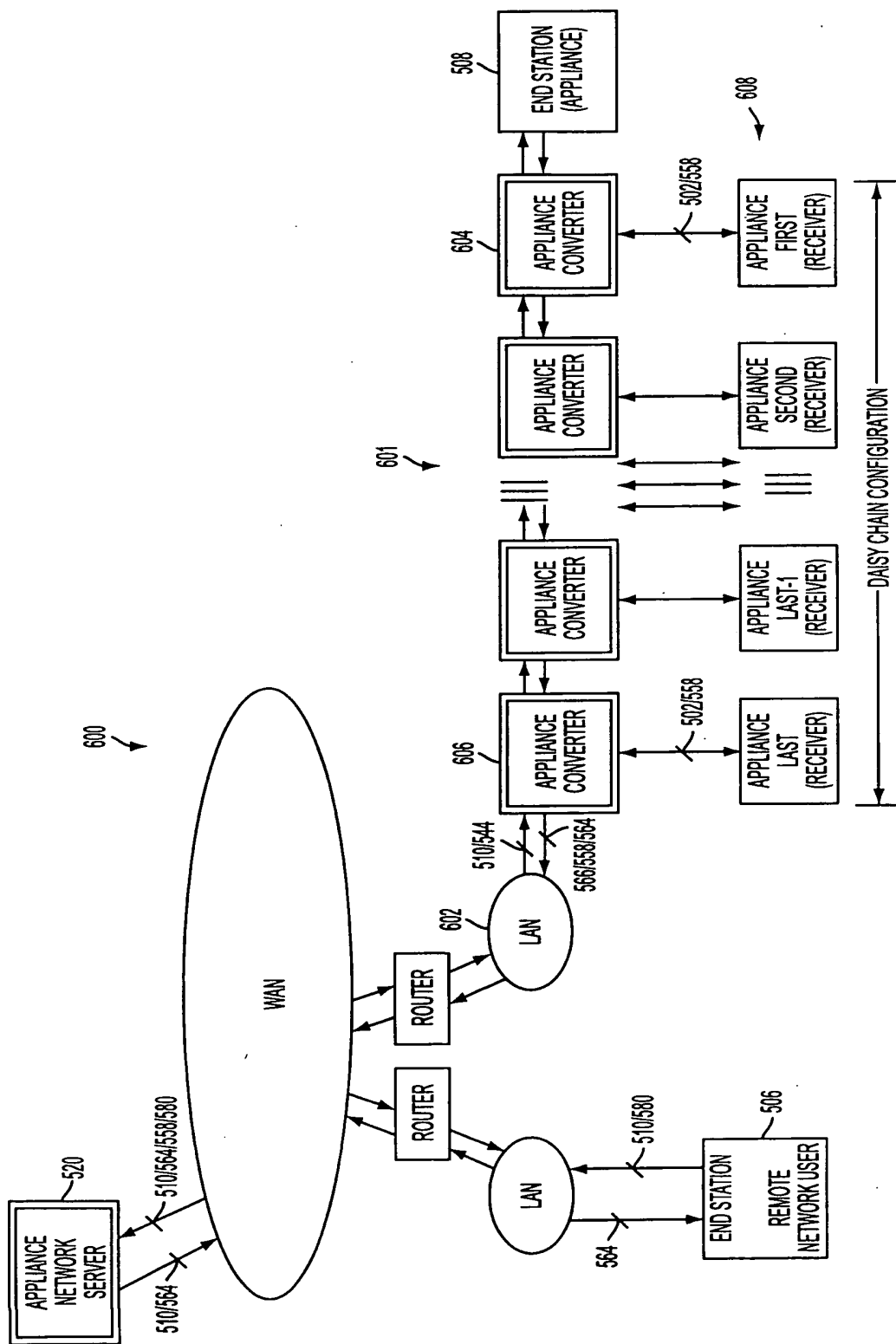


FIG. 26

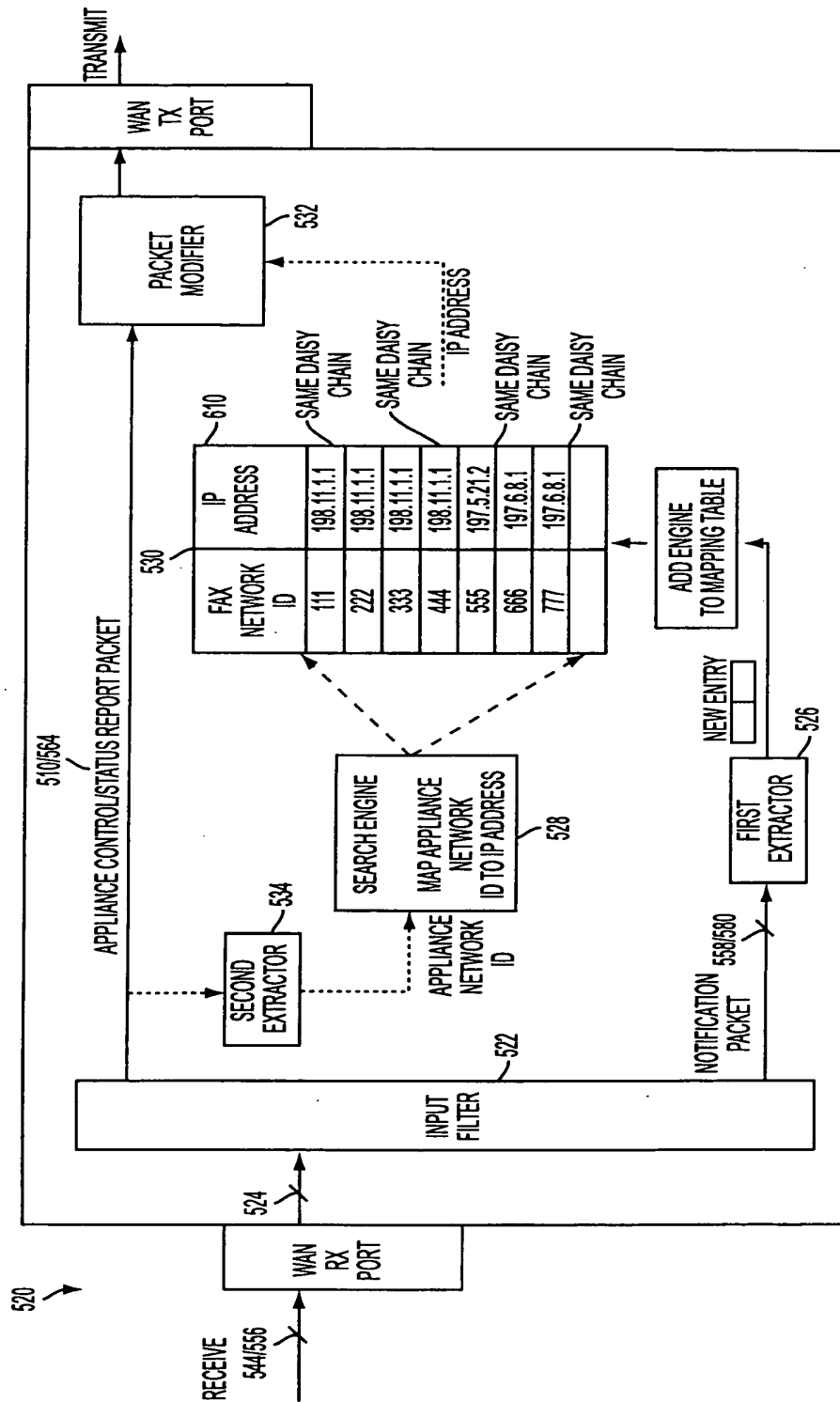


FIG. 27

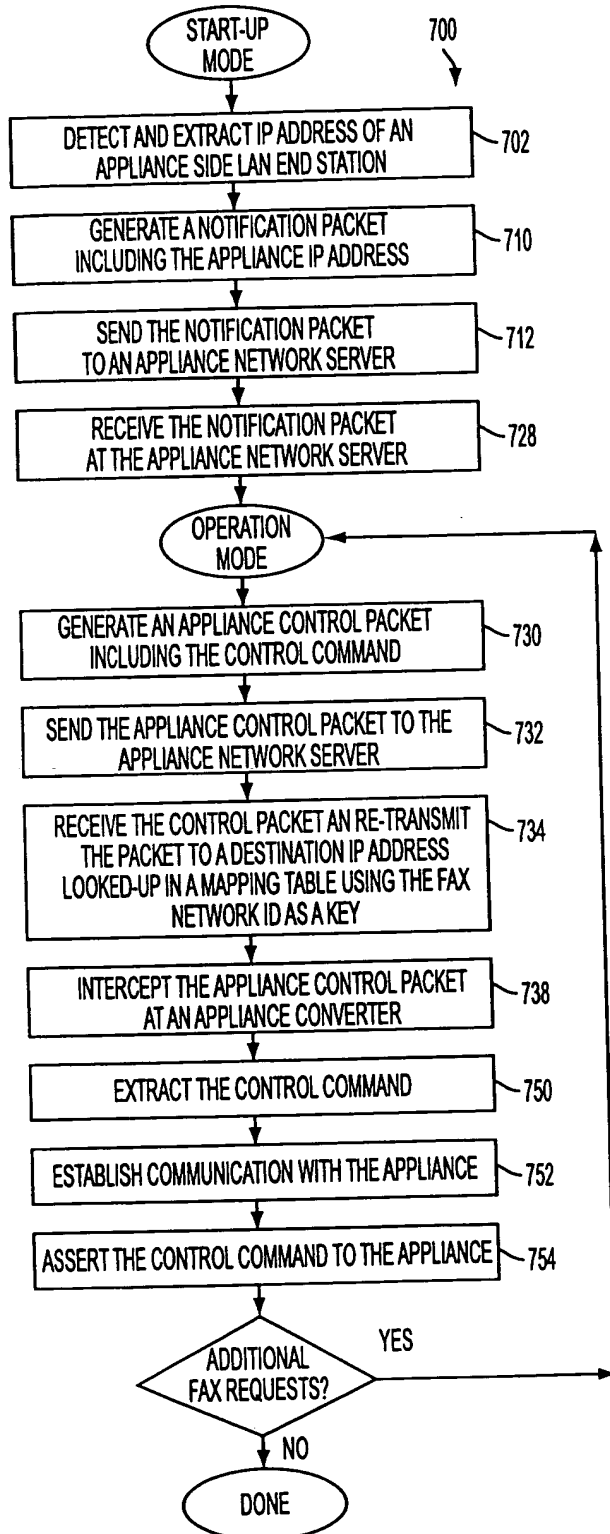


FIG. 28

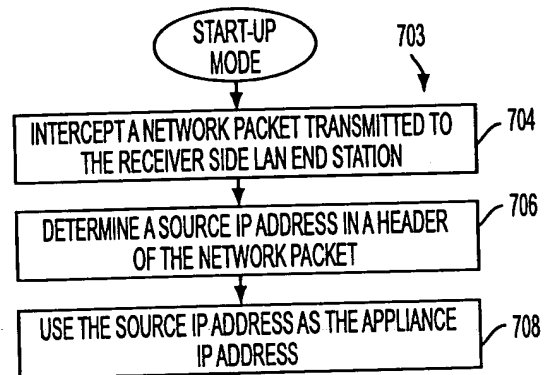


FIG. 29

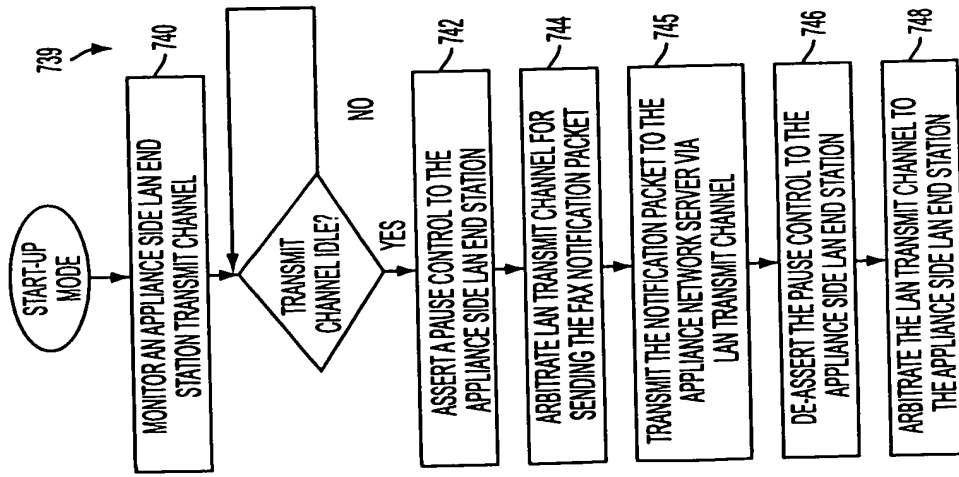


FIG. 30

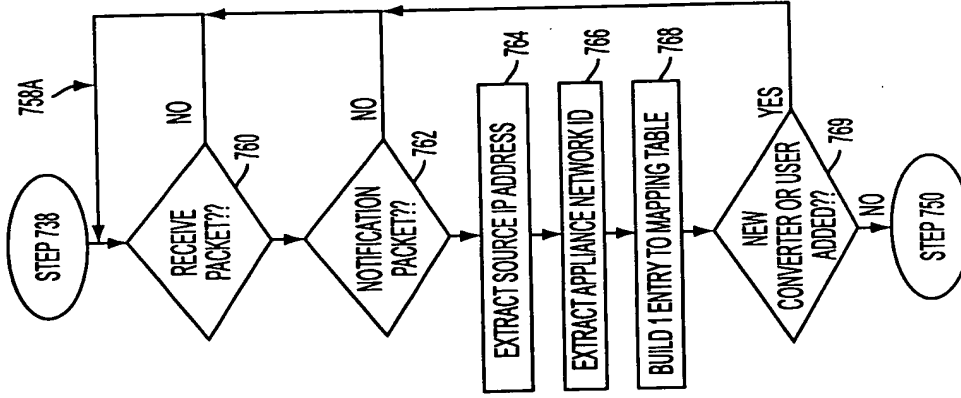


FIG. 31A

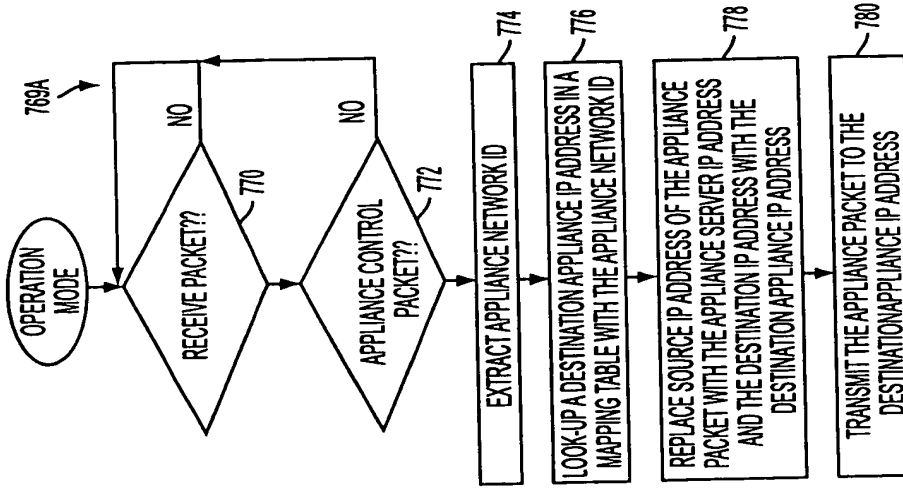


FIG. 32A

052501 00000000

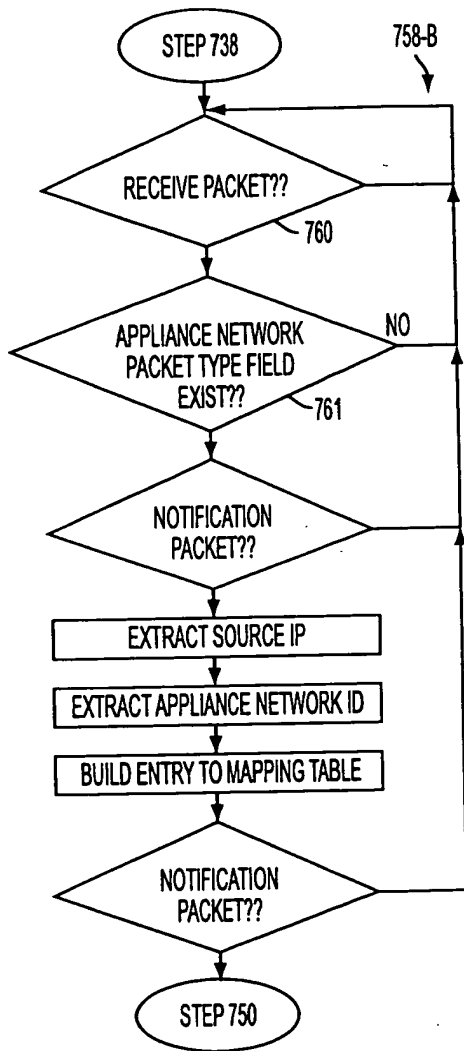


FIG. 31B

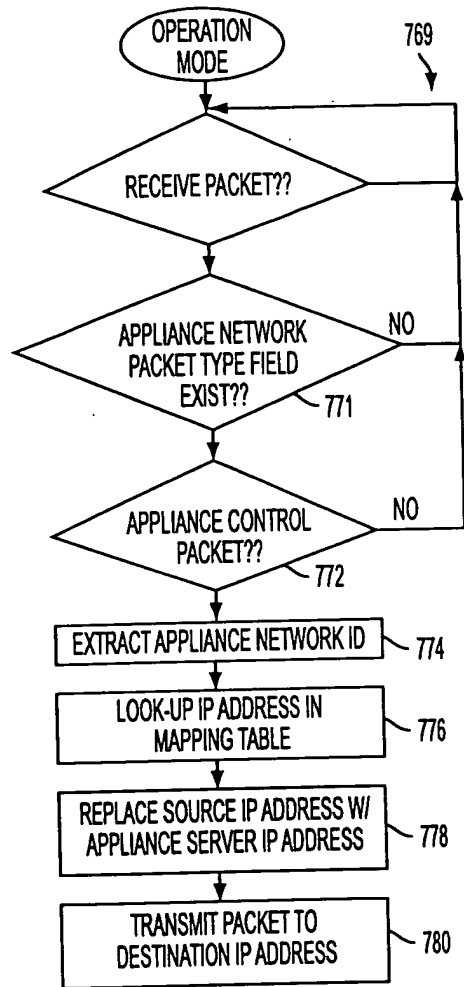


FIG. 32B

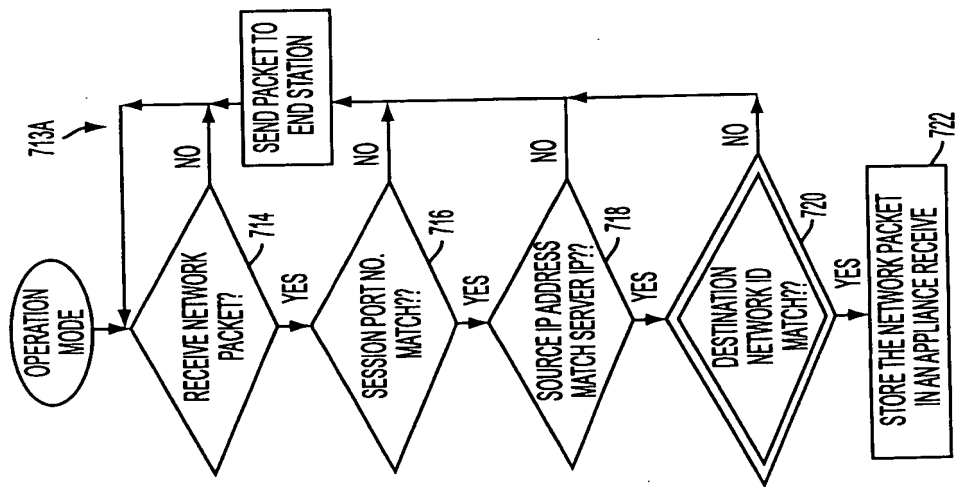


FIG. 33A

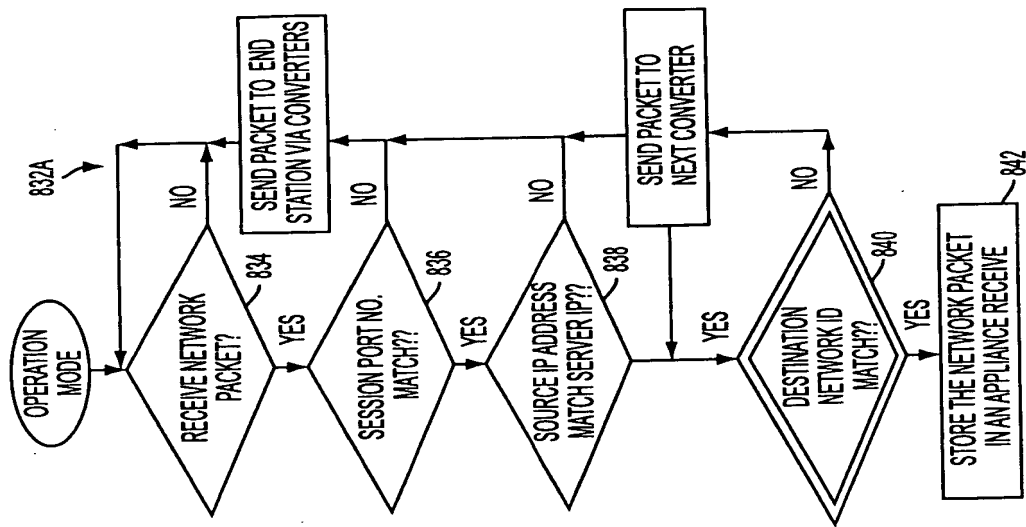


FIG. 34A

09300680-052901

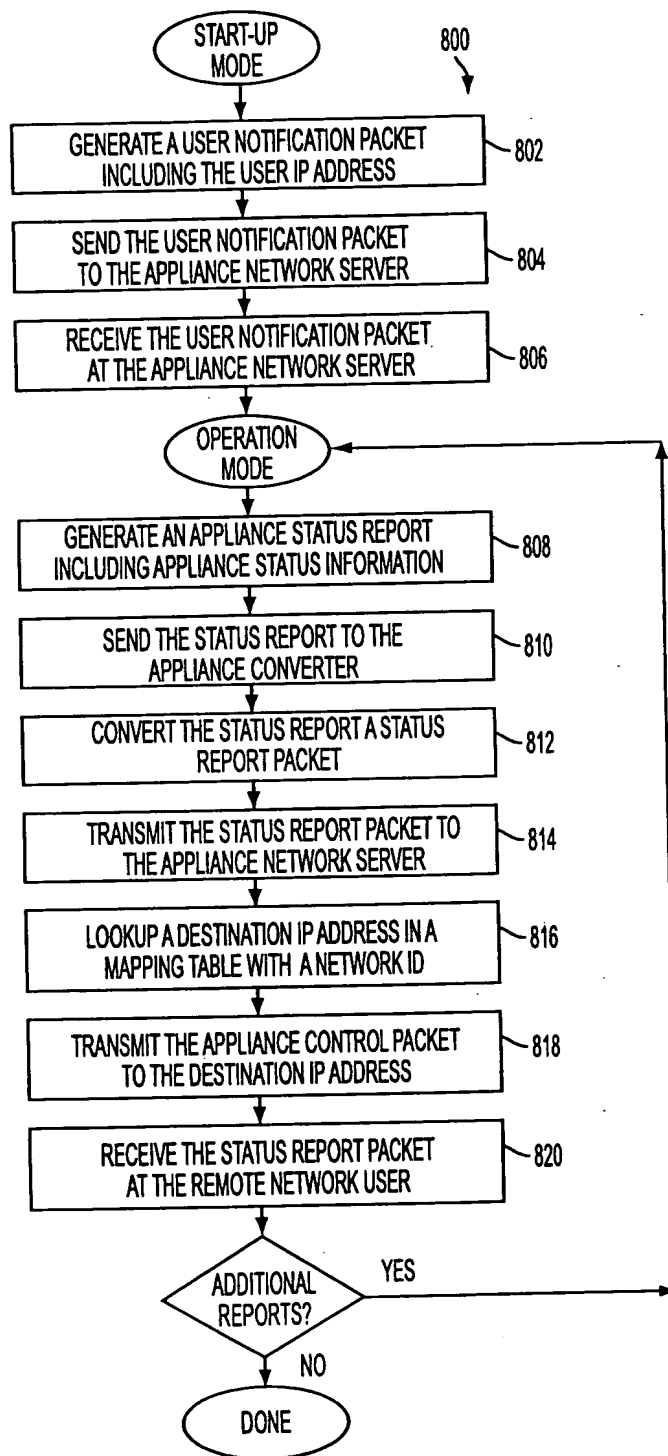


FIG. 35

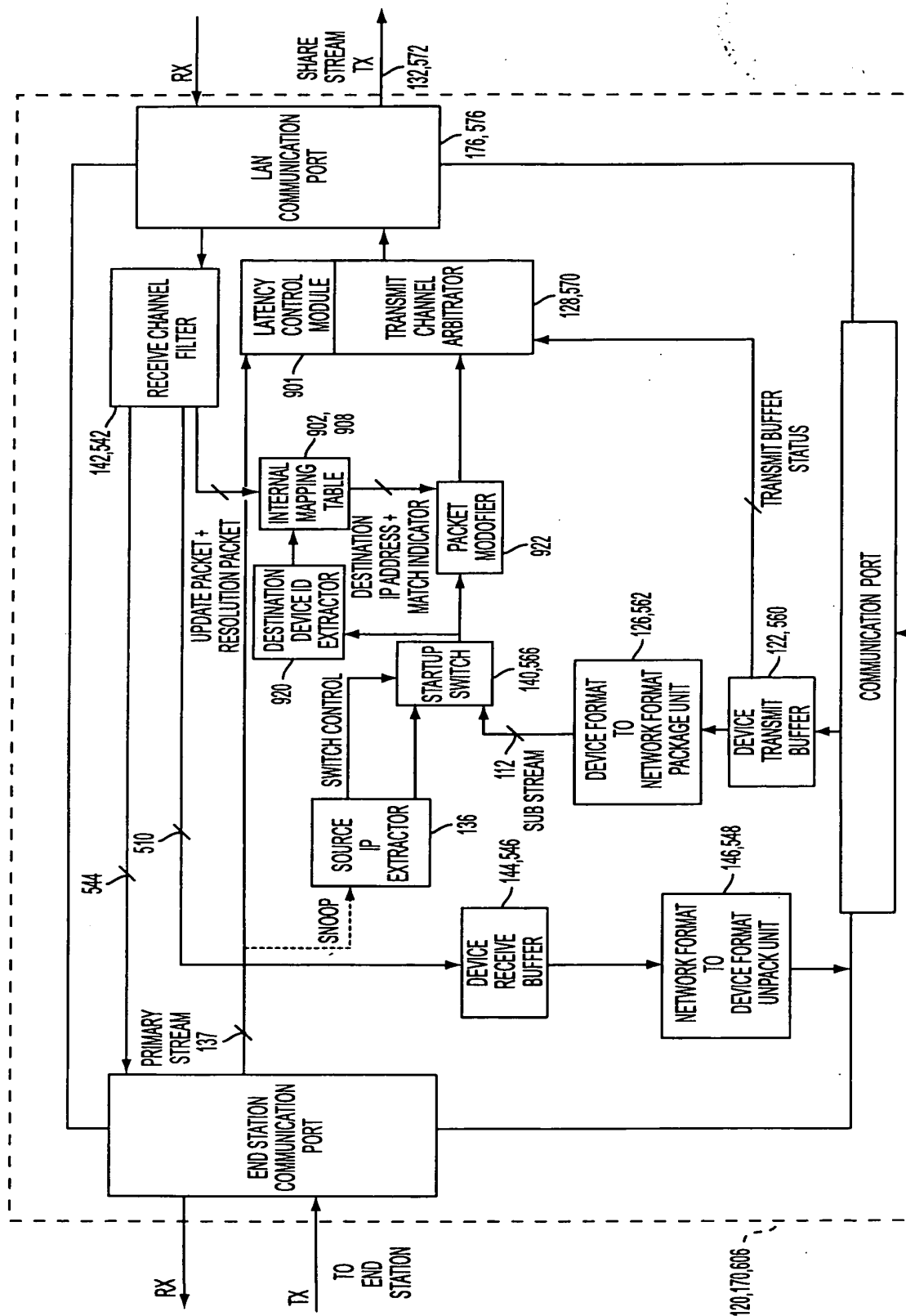


FIG. 36

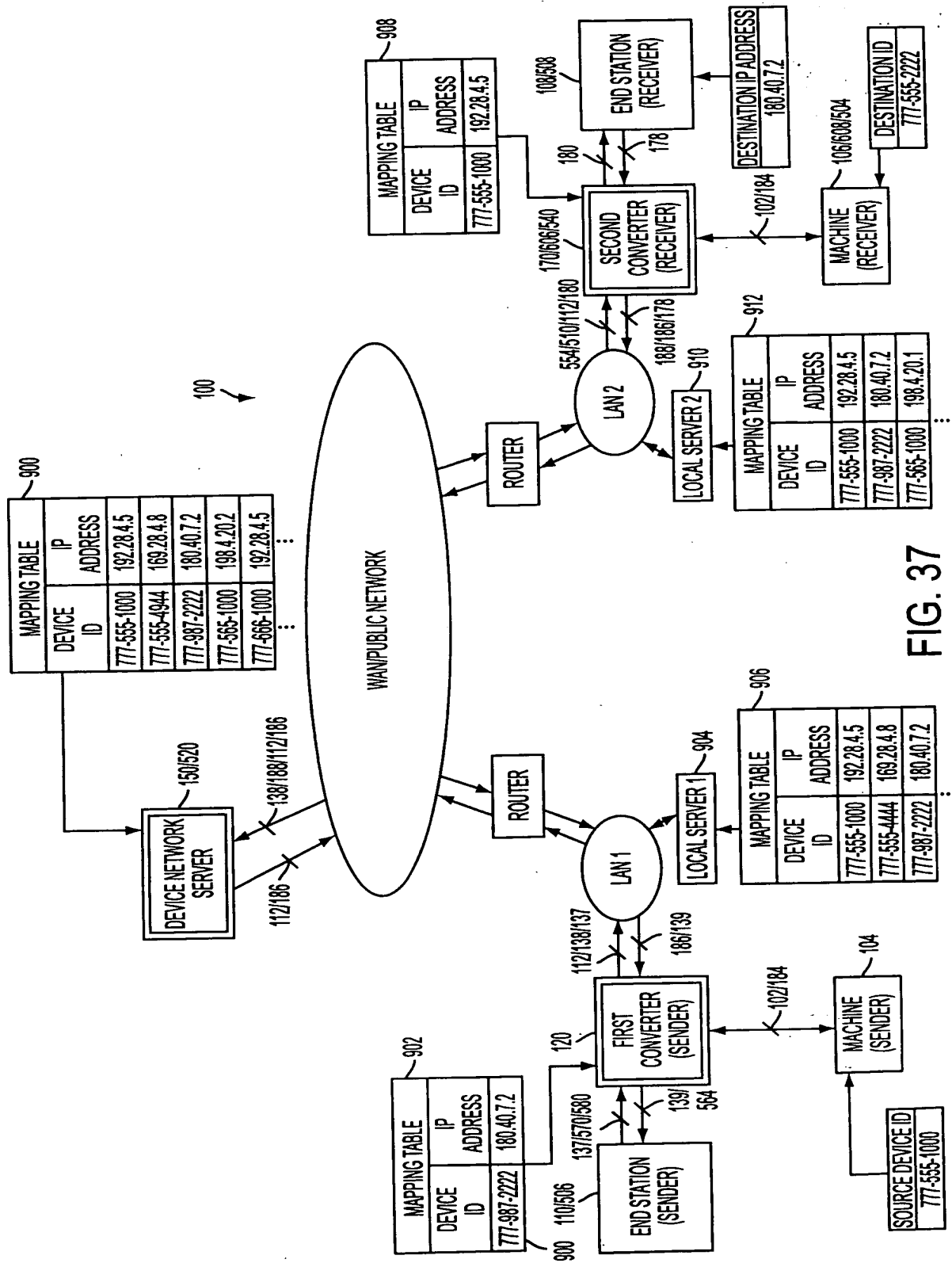


FIG. 37

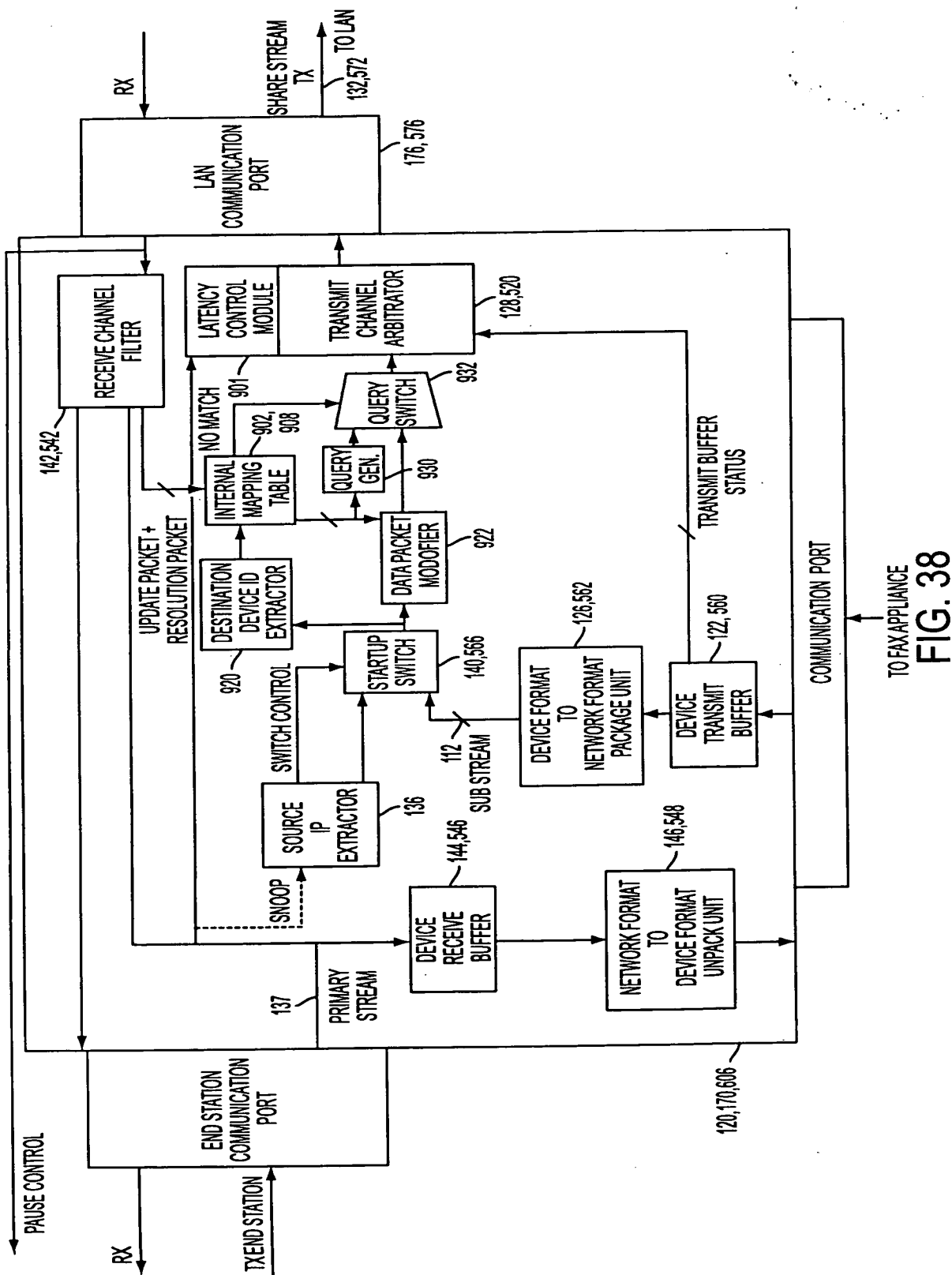


FIG. 38

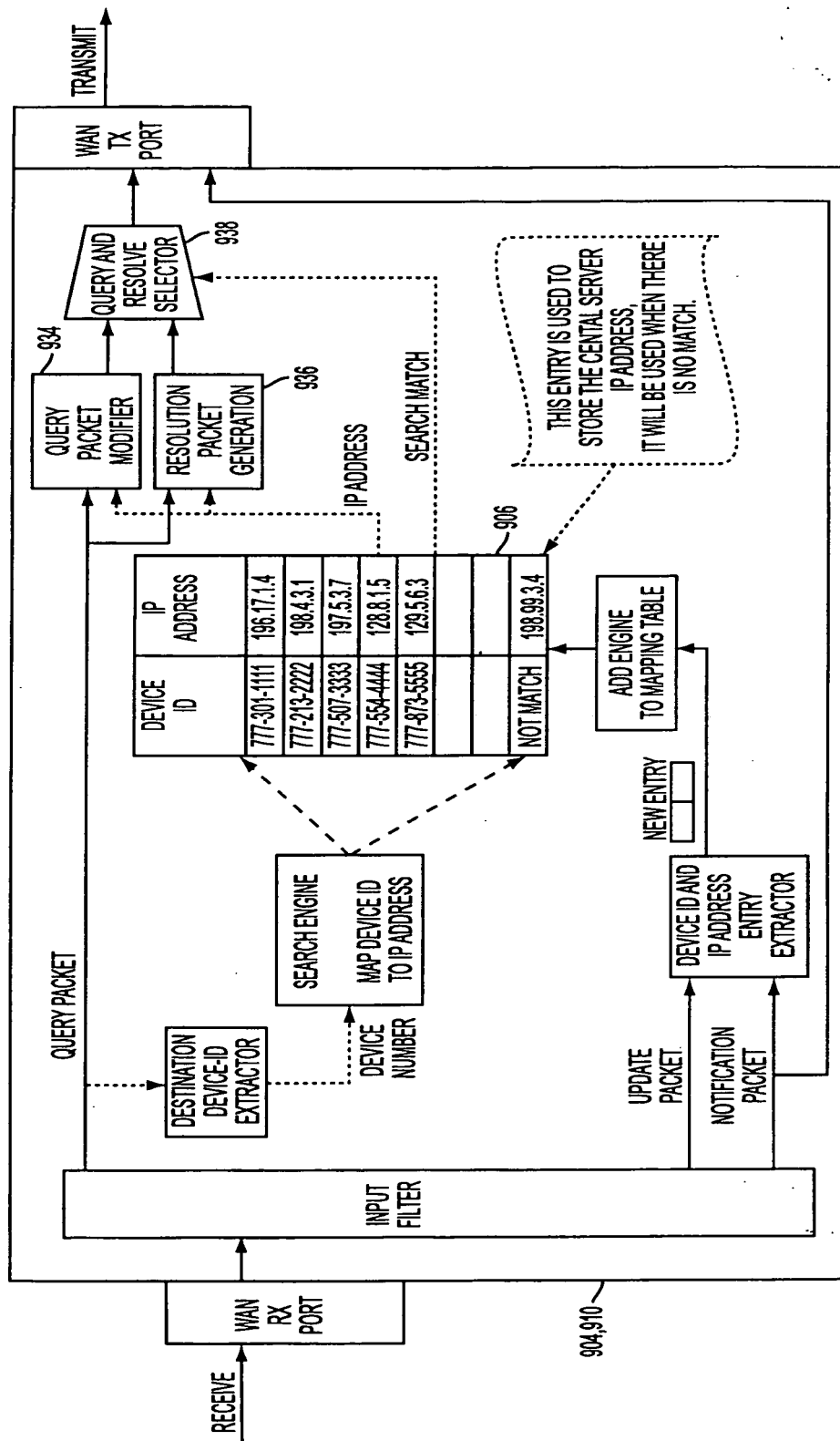


FIG. 39

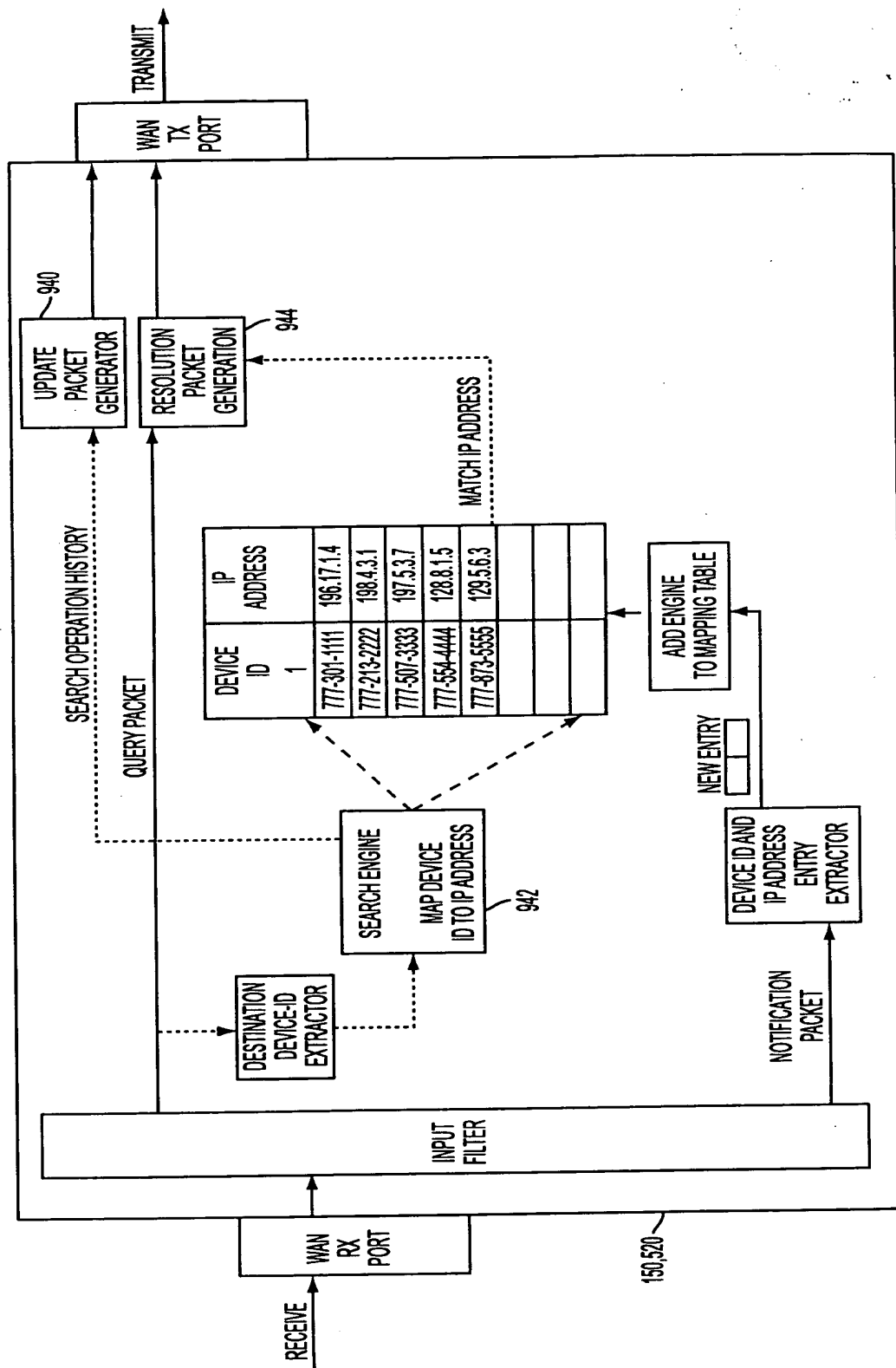


FIG. 40

```

graph TD
    1000([START-UP MODE]) --> 1002[DETECT A RECEIVER IP ADDRESS OF A RECEIVER SIDE LAN END STATION]
    1002 --> 1004[GENERATE A NOTIFICATION PACKET INCLUDING THE RECEIVER IP ADDRESS]
    1004 --> 1006[SEND A NOTIFICATION PACKET TO A LOCAL FAX SEVER, THEN TO THE CENTRAL FAX SERVER]
    1006 --> 1008[RECEIVE THE NOTIFICATION PACKET AT THE FAX NETWORK SERVER]
    1008 --> 1010([OPERATION MODE])
    1010 --> 1010[ESTABLISH A COMMUNICATION BETWEEN A FIRST CONVERTER AND THE SENDER FAX MACHINE]
    1010 --> 1012[RECEIVE THE FAX COMMUNICATION FROM THE SENDER FAX MACHINE]
    1012 --> 1014[GENERATE A FAX PACKET INCLUDING FAX TRANSMISSION]
    1014 --> 1020[QUERY AND RESOLVE THE RECEIVER IP ADDRESS]
    1020 --> 1022[SEND THE FAX DATA PACKET DIRECTLY TO THE RECEIVER CONVERTER]
    1022 --> 1024[INTERCEPT THE FAX PACKET AT A SECOND CONVERTER]
    1024 --> 1026[EXTRACT THE FAX COMMUNICATION]
    1026 --> 1028[ESTABLISH COMMUNICATION WITH RECEIVER FAX MACHINE]
    1028 --> 1030[TRANSMIT THE FAX DATA TO RECEIVER FAX MACHINE]
    1030 --> 1024{ADDITIONAL FAX REQUEST?}
    1024 -- YES --> 1010
    1024 -- NO --> 1032([DONE])
  
```

FIG. 41

03600680-052501

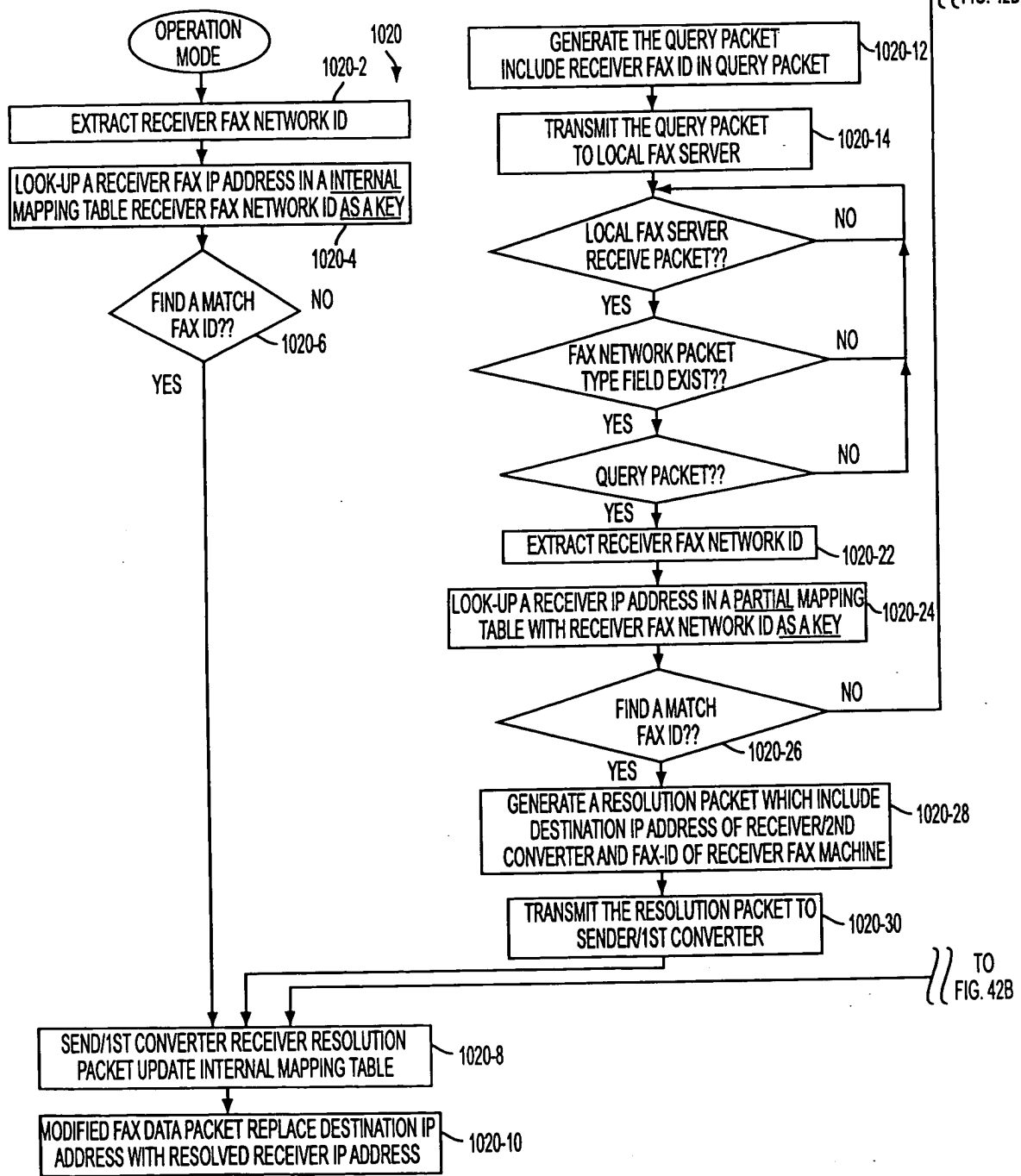


FIG. 42A

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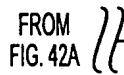


FIG. 42B